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## Relationships Among Nuclear Episodes in the Life Story, Current Identity Status, and Ego Stage in Young Adult Women

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RELATIONSHIPS AMONG NUCLEAR EPISODES  
IN THE LIFE STORY, CURRENT IDENTITY STATUS,  
AND EGO STAGE IN YOUNG ADULT WOMEN

by

Carol E. Kirshnit

A Thesis Submitted to the Faculty of the Graduate  
School of Loyola University of Chicago in Partial  
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1985

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## VITA

The author, Carol Elizabeth Kirshnit, is the daughter of Herbert and Charlotte Kirshnit. She was born April 10, 1960 in Quincy, Massachusetts. Her elementary and secondary education was obtained in the public schools of Quincy, Massachusetts and Ms. Kirshnit graduated from Quincy High School in 1978.

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## CHAPTER I

### INTRODUCTION

The purpose of the present investigation is to gain a better understanding of the process of identity development in young adult women, and to assess the relationship between one's identity status, ego stage, and the types of life experiences that are significant to the individual. More specifically, this project is an attempt to study the possible differences between people who have experienced many "turning point" nuclear episodes in their lives and those whose life stories are more continuous in nature, in terms of their relative levels of identity and ego development at the present time.

#### Ego Identity: Theoretical Background

"Who in the world am I? Ah, that's the great puzzle."

(Lewis Carroll, 1978, p. 19)

At the start of her adventures in Wonderland, Alice aptly addresses an issue that has plagued adolescents and psychologists for many years. Although most people have an intuitive understanding of what is meant by the term, "identity," attempts to formulate a clearcut and concise definition of this concept have continually fallen short of this goal. To fully appreciate the complexity of this issue, simply ask



yourself, "who am I?" The seemingly infinite number of possible answers to this question should help to elucidate the broad scope of ideas and experiences encompassed by the concept of identity. Erik Erikson describes the various ways in which he has tried to conceptualize identity:

So far I have tried out the term identity almost deliberately -- I like to think -- in many different connotations. At one time it seemed to refer to a conscious sense of individual uniqueness, at another to an unconscious striving for continuity of experience, and at a third, as a solidarity with a group's ideals (1968, p. 208).

Thus, Erikson, like Alice, acknowledges the nebulous and complex nature of identity and the difficulties that he has had in trying to define this concept.

Coming from a psychoanalytic background, Erikson postulates that the ego plays a major role in identity development. The ego is thought to integrate the various significant identifications of childhood and the resulting images of the self into a coherent sense of identity in late adolescence and early adulthood (Erikson, 1968). Thus, Erikson often uses the term "ego identity" to refer to what is more commonly known as identity. Bourne (1978a) discusses seven different theoretical perspectives from which identity can be viewed within Erikson's writings. In so doing, Bourne (1978a) draws the distinction between those definitions of identity that reflect Erikson's background in psychoanalytic theory and those which appear to be derived from alternative theoretical perspectives. Bourne has reserved the term "psychoanalytic" for those definitions of identity within Erikson's writings that emphasize intrapsychic factors in the formation of identity.

The first of these is the "genetic" standpoint. Erikson's stage theory of psychosocial development describes eight crises or tasks that the person must face and resolve successively during the course of the lifecycle. The first four of these stages are thought to occur during infancy and childhood, the fifth during adolescence, and the last three stages extend over the adult years and include old age. Stage 1 in Erikson's theory, "basic trust vs. basic mistrust," takes place during infancy and is based upon the infant's relationship with his or her primary caregiver(s). If the infant's needs for comfort and nourishment are met in a consistent fashion, the infant should begin to develop a sense of trust in his/her caregiver(s), and this security is thought to be the foundation upon which future psychosocial development is based. If, however, the primary caregiver is unresponsive to the infant's needs, the environment is likely to be perceived by the infant as being hostile. Under such circumstances, the infant's ability to trust in the world and the people around him/her is likely to be minimized or altogether lacking. Stage 2, "autonomy vs. shame and doubt," typically occurs during the second year of life and revolves around the period of toilet-training. Success in controlling one's bodily functions, and the environmental reinforcement that often accompanies the attainment of such mastery, should result in the child's first sense of autonomy. If the child is incapable of meeting the requirements for self-control during this stage, he/she is likely to develop a sense of shame and doubt in his/her ability to function autonomously.

Erikson's third psychosocial stage, "initiative vs. guilt," gener-

ally occurs between the ages of 3 and 5 years, during which time the child's language and motor skills are rapidly expanding. Children who are allowed the freedom to engage in imaginative play activities during this stage are able to experiment with various adult roles that have been modeled for them. This type of behavior is thought to help the child to contemplate and plan for the goals that he/she will pursue in the future. Erikson's third stage corresponds roughly to Freud's Oedipal stage, during which time the child is thought to develop sexual fantasies with regard to his/her opposite-sex parent. According to Erikson, children who are incapable of resolving the Oedipal complex are likely to be plagued by guilt, which will hinder their ability to develop a healthy sense of initiative through identification with their parents. Stage 4 in Erikson's theory, "industry vs. inferiority" coincides with the beginning of the child's formal education and extends into puberty. During this stage, the child who is able to master the required tasks of school and increasing responsibility should develop a sense of competence and pride in his/her ability to engage in productive work. The negative resolution of this stage is typified by the child who, incapable of meeting the tasks set forth by his/her teachers and parents, develops a sense of inferiority with respect to his/her capacity to be productive.

In Erikson's system, stage 5, "identity vs. identity confusion," begins during adolescence and involves the young person's ability to consolidate his/her resolutions of the previous four psychosocial stages into a coherent sense of self. The adolescent, having been exposed to a

variety of different experiences and possible role models, is faced with the task of developing for him/herself a stable self-definition that unites who he/she has been in the past with who he/she is at present and who he/she might be in the future. Failure to resolve the identity crisis of adolescence can result in a fragile sense of personal identity that vacillates in stability with changing circumstances.

Stages 6 through 8 in Erikson's theory involve psychosocial development during the adult years. Stage 6, "intimacy vs. isolation," is the task of young adulthood and revolves around the person's ability to commit him/herself to an intimate relationship with another person. The inability to commit oneself to another person is thought to result in isolation, the negative resolution of stage 6. "Generativity vs. stagnation" is the crisis of middle-age and comprises stage 7 in Erikson's theory. The primary issue at this stage is the adult's ability to leave a mark on the world, and this is typically accomplished through procreation or productivity in the sense of work or ideas that are created by the adult for continued use by future generations. The inability to offer something of oneself to the younger members of society is thought to result in a sense of stagnation and personal impoverishment. The eighth and final stage in Erikson's theory, "integrity vs. despair," occurs during old age, and involves the individual's capacity to come to terms with his/her place in the almost complete lifecycle. A sense of integrity is thought to result from the individual's ability to perceive order and meaning in his/her life, within the larger social order of which he/she is a part. The inability to reflect on one's life as hav-

ing been valuable and and purposeful is thought to result in a sense of despair, since the individual's ability to correct the mistakes of the past is generally limited by this stage in the lifecycle.

In Erikson's theory, the individual's resolution of each stage is thought to affect his/her ability to resolve the crises of subsequent stages. For example, the child who emerges from stage 1 with a sense of basic mistrust in the world around him/her is likely to encounter problems in coping with the tasks of later stages. In contrast, the individual who successfully resolves the crises of the early stages is likely to have a more solid foundation from which to approach the tasks of later stages. From this genetic point of view, ego identity, the successful resolution of Stage 5 (Identity vs. Identity Diffusion) in Erikson's theory, can be considered the product of the individual's resolutions of the psychosocial crises of childhood (i.e., "basic trust vs. basic mistrust," "autonomy vs. shame and doubt," "initiative vs. guilt," and "industry vs. inferiority"). Erikson refers to ego identity within this perspective as "the inner capital accrued from all those experiences of each successive stage, when successful identification led to successful alignment of the individual's basic drives with his endowment and his opportunities" (1959, p. 89).

A second theoretical perspective described by Bourne (1978a, p. 225) is the "adaptive" viewpoint, and it considers ego identity as the individual's adaptation of his/her abilities and strengths to the society in which he/she lives. In this regard, ego identity serves a directive function in bridging the gap between one's childhood experiences

and the social roles that one will assume as an adult. Erikson (1959) has thirdly spoken of ego identity as a structure within the personality:

The process of identity formation emerges as an evolving configuration -- which is gradually established by successive ego syntheses and resyntheses throughout childhood; it is a configuration gradually integrating constitutional givens, idiosyncratic libidinal needs, favored capacities, significant identifications, effective defenses, successful sublimations, and consistent roles (p. 116).

Establishment of such a structure within the individual's personality is thought to provide a stable reference point from which the adolescent can begin to take on adult tasks and responsibilities (Bourne, 1978a). The fourth psychoanalytic perspective that Erikson presents addresses the dynamic qualities of ego identity. Erikson (1968) distinguishes the functions of ego identity from those of the ego by saying that, "ego identity would in comparison be even closer to changing social reality in that it would test, select, and integrate the self-images derived from the psychosocial crises of childhood in light of the ideological climate of youth" (p. 210). Thus, ego identity serves to unite the adolescent's past self-images, derived through childhood identifications, into a coherent structure that allows him/her to fit comfortably into his/her present social milieu.

Erikson departs from a traditional psychoanalytic stance by offering three additional conceptualizations of ego identity (Bourne, 1978a). According to Erikson, an individual who has achieved ego identity should perceive a subjective sense of continuity between who he or she has been in the past and who he or she is at present. In addition, the person should be able to see unity among the various social roles taken on by

him or her.

The wholeness to be achieved at this stage I have called a sense of inner identity. The young person, in order to experience wholeness, must feel a progressive continuity between that which he has come to be during the long years of childhood and that which he promises to become in the anticipated future; between that which he conceives himself to be and that which he perceives others to see in him and to expect of him (1968, p. 87).

From this perspective, Erikson describes identity as the sense of cohesiveness which allows us to confidently anticipate the future in light of the past and present.

Erikson did not overlook the influence of sociocultural factors on the young person's developing identity, and this may be one of the most distinguishing characteristics of his theory of identity development from that of more traditional psychoanalytic theorists. Identity formation, from this viewpoint, is not merely an intrapsychic phenomenon, but rather includes and "is dependent on the process by which a society (often through subsocieties) identifies the young individual, recognizing him as someone who had to become the way he is and who, being the way he is, is taken for granted" (1968, p. 159). This view of identity, as developed through "psychosocial reciprocity" (Bourne, 1978a, p. 227), implies that one's sense of ego identity must take into account the individual's intrapsychic representation of herself as well as the sense of self which she derives from her relationships with other people and groups in her culture.

The sense of ego identity, then, is the accrued confidence that one's ability to maintain inner sameness and continuity (one's ego in a psychological sense) is matched by the sameness and continuity of one's meaning for others (1959, p. 89).

One simply has to reflect back on adolescence and recall the importance

of being "socially validated" by our peers in order to appreciate Erikson's point in this regard.

Finally, Erikson offers an existential interpretation of ego identity, whereby identity can be thought of as that which provides a purpose or meaning to the individual's life. The addition of this perspective suggests that identity involves an understanding of how we fit into the world, in addition to a personal and social perception of who we are. According to Erikson, ideological commitments serve as the mechanisms by which we ascribe meaning to our lives.

Without some such ideological commitment, however implicit in a "way of life," youth suffers a confusion of values (1968, p. 188).

Commitments to various ways of being and viewing the world are seen as essential to a stable self-definition, and without such commitments we are likely to feel alienated from our fellow human beings and unstable with regard to our sense of identity.

Erikson's various connotations of the term "ego identity" have been presented in an attempt to demonstrate the complexity of this idea. Erikson's writing has served as the dominant influence for subsequent theorizing and research on the topic of identity and identity development, and in this regard Erikson's ideas provide the point of departure for the present research project. It is important to note that Erikson viewed identity formation as a process that begins during adolescence and continues throughout the course of the individual's lifecycle. Thus, identity development is never complete or finished, but rather we are constantly revising and adapting our ego identity in the face of new challenges and crises with which we must cope.



While the end of adolescence thus is the stage of an overt identity crisis, identity formation neither begins nor ends with adolescence: it is a lifelong development largely unconscious to the individual and to his society (1959, p. 113).

Erikson has derived and applied his theory of psychosocial development and identity formation primarily through the historical case studies of famous individuals. Perhaps the most notable of these are his psychohistories of Martin Luther (1958), Mahatma Ghandi (1969), Adolf Hitler (1950, 1963), and George Bernard Shaw (1968). Such observational research has provided considerable insight into the development of these individuals in question and has served to stimulate idiographic case-study investigations of the life stories of normal individuals (e.g., Kotre, 1984). In a more nomothetic spirit, researchers have operationalized Erikson's concept of identity for larger-group studies in which individual differences in "identity status" are measured (e.g., Marcia, 1966, 1967).

### Review of the Empirical Literature on Ego Identity

#### Identity Statues

Prior to 1966, most of the research on identity and identity development was conducted using the self-descriptive Q-sort (Block, 1961; Gruen, 1960; Heibrun, 1964) and self-report questionnaires (Dignan, 1965; Rasmussen, 1964). These early studies have been criticized for not adequately assessing the construct of ego identity (e.g., viewing identity as "role consistency," Heibrun, 1964) and for failing to control for the influence of such confounding variables as social desirability or response bias (Bourne, 1978a). Similarly, much of the early

research on ego identity focused on qualities or characteristics that might be present in the individual after he or she has achieved identity, rather than dealing with the various psychosocial factors that might contribute to the formation of ego identity (Marcia, 1966).

James Marcia (1966, 1967) has made a substantial contribution to the empirical study of ego identity. Marcia has conceptualized the development of ego identity as a two-fold process, involving (1) crisis or exploration of the various roles and lifestyles available to the individual and (2) the subsequent commitment to a relatively enduring definition of the self. Furthermore, Marcia (1966, 1980) postulates the existence of four distinct styles of resolution of the "identity crisis" of late adolescence, which he has formulated on the basis of the presence or absence of exploration and commitment in the areas of occupation, and religious and political ideology. These four "identity statuses," as Marcia (1966) has termed them, are as follows: identity achievement - the individual has explored a variety of alternatives with regard to occupation and ideology, and has been able to commit herself to a particular set of occupational and ideological goals; moratorium - the individual is presently in crisis and is in the process of exploring the occupational and ideological alternatives available to him, but has yet to commit himself to a particular occupation or ideological stance; foreclosure - the individual has committed herself to a particular occupational and ideological self-definition, usually based upon that of her parents, without experiencing a crisis or exploring any possible alternatives; and identity diffusion - the individual has no particular occu-

pational or ideological goals, regardless of whether or not he has experienced a period of crisis in which he explored the various occupational and ideological options available to him.

Table 1.1

Identity Status Components

	<u>Crisis</u>	<u>Commitment</u>
Identity Achievement	yes	yes
Moratorium	yes	no
Foreclosure	no	yes
Identity Diffusion	no	no

In addition to specifying the four modes by which adolescents may resolve the "identity crisis," Marcia (1966) has developed a semi-structured interview to assess the presence or absence of exploration and commitment in the areas of occupation, religion, and political ideology. This instrument has revolutionized the empirical study of ego identity, and almost all of the research on this topic after 1966 has employed Marcia's technique (Bourne, 1978a). See Methods, pp. 56-59 and Appendix, pp. 134-135 for a complete description of this measure and its scoring criteria. One of the major advantages of Marcia's semi-structured interview over previous methods of measuring identity development is that Marcia's methodology allows for a more careful examination of the manner by which identity is formed, by focusing on the components of crisis and commitment. In this respect, Marcia's technique is consistent with Erikson's (1959) notion of identity formation as a fluid process extending throughout the lifecycle. Marcia's view of identity

development is indeed quite similar to that of Erikson.

A well-developed identity structure, like a well-developed superego, is flexible. It is open to changes in society and to changes in relationships. This openness assures numerous reorganizations of identity contents throughout the "identity-achieved" person's life, although the essential identity process remains the same, growing stronger through each crisis (Marcia, 1980, p. 160).

Much of the research undertaken using Marcia's identity status paradigm has utilized large samples of subjects and has focused on the relationship between the four identity statuses and performance on psychological variables thought to be related to identity. College student samples have been over-represented in the empirical literature on identity development, and a majority of the earlier studies in this area focused predominantly on males. This latter trend has been changing in more recent years, and there are now a considerable number of studies addressing female identity development and possible sex differences.

With respect to the relationship between cognitive attributes and identity, one of the most consistent findings in the literature on identity has been the fact that individuals (male and female) in different identity statuses do not differ from each other on measures of intelligence (Cross & Allen, 1970; Marcia, 1966; Marcia & Friedman, 1970; Schenkel, 1975). Introducing stress into a situation where intellectual performance is being assessed does, however, yield differences between the performances of individuals in each of the four identity statuses. Marcia (1966) demonstrated this by having male subjects complete a concept attainment task in the presence of an oversolicitous investigator (a stressful situation). Under these conditions, identity achievement subjects performed the best, while foreclosed subjects showed the poor-

est performance.

Waterman and Waterman (1974) studied the relationship between identity status and the cognitive dimension of "reflexivity-impulsivity" in response style, as measured by the Matching Familiar Figures Test (Kagan, Rosman, Day, Albert, & Phillips, 1964). They reported that foreclosed and identity diffuse individuals were more impulsive, responding more quickly and making more errors, than identity achieved and moratorium subjects, who were more reflective in their response style. In differentiating between high- and low-maturity women (high maturity being roughly analogous to Marcia's achievement and moratorium statuses, and low maturity corresponding to Marcia's foreclosure and diffusion statuses), Josselson (1977) noted that high-maturity women were more reflective and less impulsive than low-maturity women. Schenkel (1975) investigated the relationship between field-independence and identity status in college women. Field-independence is the individual's capacity to separate an element from the context within which it is embedded (Witkin, Dyk, Faterson, Goodenough, & Karp, 1962). Using the Embedded Figures Test (Witkin, Oltman, Raskin, & Karp, 1971) and Human Figure Drawings, scored according to the Sophistication-of-Body-Concept Scale (Witkin et al., 1962), Schenkel found that identity-achieved and foreclosed women were more field-independent than women in either the moratorium or or identity-diffused statuses.

Academic achievement and adjustment to college life seem to be related to one's identity status. A strong positive relationship was found between identity achievement and grade point average (Cross &

Allen, 1970), and Waterman (1970) supported this finding by demonstrating that identity achievement individuals studied more as freshmen and had better study habits than subjects in the other three statuses. Marcia and Friedman (1970) noted that college women in the achievement and foreclosure statuses chose more difficult majors than moratorium or diffusion women. Interestingly enough, Orlofsky (1978) found that achievement and moratorium subjects of both sexes had a higher need for achievement, as measured by the Thematic Apperception Test (McClelland, Atkinson, Clark, & Lowell, 1953), than foreclosure or diffusion subjects. In this same study, Orlofsky found a significant interaction between sex and identity status with regard to subjects' "fear of success" (Horner, 1968), such that women in the achievement and moratorium statuses showed the most fear of success, while for men, fear of success was most strongly associated with the foreclosure and diffusion statuses. Studying students' satisfaction with college, Waterman and Waterman (1970) found that subjects who were classified as moratoriums with respect to occupation were much less satisfied with their education and the college administration than were subjects classified as foreclosed or identity-achieved. Consistent with this finding, Waterman and Waterman also found that 80% of students classified as moratoriums at the end of their freshman year subsequently changed their majors, in comparison to an average of 30% of subjects in the other three statuses. These investigators also noted that foreclosed and diffuse students who left school tended to do so as a result of negative external pressures (e.g., flunking), in comparison to identity-achieved students, who were

more likely to leave school on their own initiative and for a wider variety of reasons. Aesthetic interests and artistic expression have also been found to be related to higher identity statuses (i.e., achievement and moratorium) among college students. Waterman and Waterman (1971) found that achievement and moratorium college males were more culturally sophisticated (i.e., had a greater interest in music, art, and literature) than foreclosure and diffusion males. Likewise, Waterman, Kohutis, and Pulone (1977) found that college men and women in the identity achievement status were more likely to write poetry than their fellow students in the other three statuses.

Personality correlates of identity status have also received a considerable amount of empirical attention. With regard to anxiety, male moratorium subjects have been found to score higher on both the Welsh Anxiety Scale (Marcia, 1967) and the Psychasthenia Scale of the Minnesota Multiphasic Personality Inventory (Oshman & Manosevitz, 1974) than subjects in the other identity statuses. Foreclosure subjects of both sexes have consistently scored the lowest of any of the statuses on the Welsh Anxiety Scale (Marcia, 1967; Marcia & Friedman, 1970). In contrast to the findings with male subjects, identity diffusion females have obtained higher scores than other subjects on the Welsh Anxiety Scale (Marcia & Friedman, 1970). Schenkel and Marcia (1972) found that identity diffuse and moratorium women clustered together and scored significantly higher on the Welsh Anxiety Scale than identity achieved and foreclosed women. From these findings, it would appear that the lack of occupational and ideological commitments characteristic of individuals

in either the moratorium or diffusion statuses is somehow related to increased anxiety, whereas the presence of commitment, either premature (foreclosed) or self-generated (identity achieved), seems to serve as a defense against anxiety. The noted sex differences with regard to anxiety, however, remain puzzling.

Men and women in the foreclosure status have consistently been found to be higher in authoritarianism, as measured by the California F Scale, than people in the other three statuses. In contrast, moratorium men and women tend to score significantly lower than others on this measure of authoritarianism (Marcia, 1966, 1967; Marcia & Friedman, 1970; Matteson, 1977; Schenkel & Marcia, 1972). Using the Milgram obedience task, Podd (1972) had subjects deliver what they thought to be the "maximum" electrical shock to a confederate "victim." Of the subjects who administered the maximum electrical shock to the victim, only the foreclosures were readily willing to do so again. Most disconcerting is the fact that all of the foreclosure subjects who administered the maximum level of electrical shock reported that they would be willing to do it again. Since foreclosure individuals are often thought of as people who have adopted their "commitments" directly from parental authority figures (Bourne, 1978a), their tendency toward authoritarianism and obedience is not particularly surprising.

In keeping with the findings on the relationship between identity status and authoritarianism, foreclosure and diffusion individuals have been found to score consistently lower than individuals in the other two statuses on various measures of self-directedness. Orlofsky, Marcia,



and Lesser (1973) observed that male foreclosures scored the highest of all of the statuses on the Social Desirability Scale of the Edwards Personal Preference Schedule (EPPS) and the lowest on the Autonomy Scale of the EPPS. Marcia (1966) found that male foreclosures scored higher than all of the other statuses on the Conventionality Scale of the California F Scale. Matteson (1977) showed that among Danish adolescents (17- and 18-year olds) of both sexes, foreclosure subjects scored the lowest of all groups on the Autonomy Scale of the Omnibus Personality Inventory. Identity achievement and moratorium males in this study scored significantly higher than foreclosure and diffusion males on the Autonomy Scale, whereas females, while showing a pattern of results similar to that of males, were not found to have significant differences between the identity statuses with respect to autonomy. Toder and Marcia (1973) studied reactions to conformity pressure among college women, and found that achievement and foreclosure women were less likely to yield to conformity pressure in the Asch conformity task (1956) than were moratorium and diffusion women. This last finding contradicts the consistently found trend for foreclosure males, and suggests that there may be important sex differences among foreclosures and moratoriums.

Locus of control (Rotter, 1966) is another variable that has been used extensively in the research on identity. Locus of control refers to the manner in which people attribute causality to the consequences of their actions. Persons with an internal locus of control tend to assume personal responsibility for the results of their behavior, while people with with a more external locus of control demonstrate a tendency to

view the environment as the primary source of reinforcement and/or punishment for their actions. Waterman, Buebel, and Waterman (1970) found that foreclosure and diffusion males were more externally-oriented, in contrast to achievement and moratorium subjects, who were found to be more internally-oriented. In a study of college women, Ginsburg and Orlofsky (1981) found no differences among the identity statuses with regard to locus of control, although there was a tendency for identity-achieved women to be somewhat more internally-oriented than other subjects. Adams and Shea (1979) studied locus of control among college men and women. In contrast to the findings noted above, these investigators found men and women to perform similarly within each of the identity statuses, with achievements and foreclosures being significantly more internally-oriented than diffusion subjects. Moratorium subjects fell between the two extremes and did not differ significantly from any of the other three groups. Matteson (1977) investigated adolescent males and females, finding no significant sex or identity status differences with regard to locus of control. The inconsistency among the findings cited above suggests, at the very least, that locus of control is not the best variable by which to differentiate among identity statuses.

Like locus of control, self-esteem has yielded inconsistent findings in its relation to identity status. Marcia (1966) studied male college students and found no significant differences among identity status groups with regard to self-esteem. Observing male subjects' responses to either positive or negative feedback about their intellec-

tual ability, Marcia (1967) found that, regardless of the type of feedback given to subjects, the self-esteem scores of achievement and moratorium subjects were affected significantly less by feedback than those of the foreclosure and diffusion subjects. This result is consistent with Gruen's (1960) earlier finding that individuals with a poorly defined sense of self are more likely than others to accept a false personality description of themselves. Marcia and Friedman (1970) found an opposite pattern of results among college women, such that identity achievement women obtained the lowest scores in self-esteem of any status, while foreclosure subjects showed the highest level of self-esteem among the four groups. A subsequent study by Schenkel and Marcia (1972) found achievement women to score higher than foreclosure and diffusion women on a measure of self-esteem. Orlofsky (1978) was unable to find any differences in self-esteem among the identity statuses in a sample of males and females. Hodgson and Fischer (1979) found that women who were following a more traditionally feminine pathway to identity development (i.e., those whose stages of identity and intimacy development were temporally merged, as opposed to those who followed a more masculine pathway and developed intimacy only after having established a stable identity -- see the discussion of sex differences below for clarification of this point) scored higher in self-esteem than women who were following a more masculine route to identity formation. Ignoring the findings of Schenkel and Marcia (1972) and Orlofsky (1978), some theorists (e.g., Marcia, 1980) have suggested that nontraditional women are likely to experience conflict between their own aspirations and the more

conventional social sanctions for traditional "feminine" behavior. Thus, nontraditional women are thought to perceive a lack of social support, in addition to feeling alienated from their more traditional female peers. This type of an interpretation has been used to explain the low self-esteem scores in high identity women. In light of the contradictory findings with regard to self-esteem in women and the fact that investigators have failed to adequately assess subjects' perceptions of their social environment, an interpretation such as the one above must be taken as conjecture.

Moral reasoning has been found to be related to identity status in males. Podd (1972) administered a sample of Kohlberg's (1964) moral dilemmas to junior and senior college males and found that identity achievement subjects scored significantly higher in moral development than foreclosure and diffusion subjects. Males in both the achievement and moratorium statuses were more likely to display "post-conventional" (stages 5 and 6) moral reasoning, while foreclosure and diffusion subjects more commonly showed pre-conventional and conventional levels of moral reasoning. Podd (1972) also looked at subjects' moral behavior by having them engage in the Milgram obedience task. He noted no significant differences among the statuses with regard to their likelihood of administering the maximum amount of electrical shock to a confederate "victim," although he found that subjects in different statuses gave different reasons for their behavior. Podd also observed that foreclosure and diffusion subjects were more willing than achievement or moratorium subjects to participate in this procedure again.

Ego development has also been studied with regard to its relationship to identity. Ego development, as conceptualized by Jane Loevinger (1966, 1970, 1976) and measured by the Washington University Sentence Completion Test (see Methods, pp. 59-60 and Appendix, p. 132 for a complete description of this instrument and its scoring criteria), refers to "the framework of meaning which one subjectively imposes upon experience" (Hauser, 1976, p. 930). Ego development is thought to reflect a process of growth occurring throughout childhood and adolescence, whereby the maturing individual comes to view the world with increasing levels of complexity (Loevinger, 1976). In this regard, ego development has been viewed as a broader and more encompassing construct than either ego identity or moral development. At lower levels of ego development, individuals are characterized as either impulsive or self-protective. The middle stages of ego development include people who are conforming or conscientious, while the highest stages of ego development reflect a more autonomous or integrative approach to the world (Adams & Fitch, 1982). There is evidence that Loevinger's stages of ego development are associated with the level of an individual's maturity with regard to character development, cognitive style, impulse control, and interpersonal relationships (Candee, 1974; Hauser, 1976; Loevinger, 1976).

One would expect there to be a relationship between higher stages of ego development and the higher identity statuses. Adams and Shea (1979) studied college students of both sexes and found that identity-achievement subjects were more likely to be at higher (post-conformist)

levels of ego development, while diffusion subjects tended to be in the lower (pre-conformist) stages of ego development.. Moratorium and foreclosure subjects occupied more intermediate levels of ego development and were not found to be significantly different from one another, although more moratorium than foreclosure subjects were rated at post-conformist stages of ego development. Ginsburg and Orlofsky (1981) investigated the relationship between identity status and ego development in college women. They found that achievement and moratorium women scored at significantly higher levels of ego development than women in the foreclosure and diffusion statuses. The majority of moratorium and achievement subjects were rated at post-conformist levels of ego development, while most of the foreclosure and diffusion subjects were at conformist stages of ego development. The findings from these two studies suggest that there is a similar relationship between identity status and ego development for males and females, implying that ego development follows a consistent pattern for members of both sexes.

### Sex Differences

Because much of the early research on identity status focused on identity development in males, and studies involving female subjects have not always yielded results consistent with those found in males, investigators have begun more recently to examine the possibility of sex differences in identity formation. Research by Douvan and Adelson (1966) suggested that interpersonal issues, such as sexual attitudes, dating, and friendship, might be more salient with regard to identity development in women, in contrast to the importance of occupational and

ideological issues for male identity development. As a consequence, Marcia and Friedman (1970), in extending the identity statuses to college women, included a question about attitudes towards premarital intercourse. They noted that identity status assigned in terms of sexual ideology explained more of the variance in their dependent measures for the women under investigation than did the identity status ratings derived from the portion of interview dealing with occupation, religion, and politics. Schenkel and Marcia (1972) assessed the relationship between attitudes towards premarital intercourse and identity status in college women, and found that subjects' identity statuses based on the sex interview led to greater differentiation among the identity statuses on the dependent measures (authoritarianism, self-esteem, and anxiety) than identity statuses based on the categories of occupation, religion, and politics. Women rated as identity achievement on the sex interview were found to show greater psychological comfort (higher self-esteem and lower anxiety) than those subjects classified as identity achievement in the areas of occupation, religion, and politics. Finally, these investigators found that the religion portion of the standard interview yielded results consistent with those found from the premarital sex area, and the authors concluded that the area of religion is almost as predictive as the area of premarital sex in determining women's identity statuses.

Matteson (1977) utilized the four-category identity status interview (occupation, religion, politics, and attitudes towards premarital intercourse) in a study of identity development in Danish adolescent

males and females. He found that more females than males were rated as achievement or moratorium in the area of sexual standards. Looking at exploration and commitment separately, Matteson noted that women showed a higher level of exploration in the area of sexual standards than males, and women were generally higher in exploration than men over all of the content categories of the interview. Interestingly enough, Matteson also found that sexual standards was the most important content area for male subjects, accounting for a larger proportion of the variance on the dependent measures than any other content area. Waterman and Nevid (1977) replicated the findings of Matteson (1977) with a sample of American college students, observing that more women than men had reached identity achievement in the area of sexual standards, while a majority of the men were rated as foreclosed in this content area. As a result of finding sex differences among the content areas of the Identity Status Interview, researchers have extended the identity interview to include more interpersonal content areas for both sexes and have begun to look at identity status in each of the content areas separately, rather than using overall identity status ratings. For instance, Grotevant, Thorbecke, and Meyer (1982) have revised the Identity Status Interview to include questions on friendship, dating, and sex-role attitudes, in addition to the original questions on occupation, religion, and politics. (See Methods, pp. 63-67 and Appendix, pp. 125-127 for a description of of this instrument and its scoring criteria). Rogow, Marcia, and Slugoski (1983) found that religion and sex-role attitudes were more predictive of overall identity status in



male subjects, while occupation was the least predictive. These authors suggest that the process variables of crisis and commitment may be more important to identity formation than any of the particular content areas that are typically assessed. Moreover, they assert that any personally relevant content area could be employed in the study of identity development.

One of the more significant issues in the area of sex differences in identity status has to do with the fact that the statuses of foreclosure and moratorium seem to have different implications for men and women. More specifically, whereas the "higher" identity statuses for males appear to be identity achievement and moratorium, achievement and foreclosure have often been found to be the "higher" identity statuses among women (e.g., Schenkel, 1975; Toder & Marcia, 1973). For example, Schenkel (1975) found that achievement and foreclosure women were more field-independent than moratorium and diffusion women. Similarly, Toder and Marcia (1973) found that achievement and foreclosure women were less likely to tend towards conformity in an Asch-type situation than were moratorium and diffusion women. Since both the achievement and foreclosure statuses share the common element of high commitment, Marcia (1980) has suggested that stability might be a more salient issue for women than for men. Marcia also asserts that this phenomenon is related to social influences, whereby males are more likely to receive social support for exploratory, identity-seeking activities, while women have traditionally received less social support for such behavior. For instance, women raised in a traditional atmosphere have often been

expected to pursue the goals of marriage and motherhood without question, while the socialization of males has typically involved the notion that there are many more potential roles to which young men can aspire. Although Marcia's interpretation of social influences affecting the identity development of males and females in different ways seems reasonable, Schenkel's (1975) finding that achievement and moratorium women tend to be more traditional than either foreclosure or diffusion women casts doubt upon Marcia's theory. In addition, studies of identity status clustering in women have yielded inconsistent results. For example, Marcia and Friedman (1970) found that female achievers and foreclosures tended to behave as a group, but Schenkel and Marcia (1972) were unable to replicate these findings, observing instead that achievement and foreclosure subjects tended to cluster together on some dependent variables (e.g., low anxiety), while achievement and moratorium subjects were more similar to each other on other variables (e.g., low authoritarianism). Ginsburg and Orlofsky (1981) found that identity achievement and moratorium women were at higher, post-conformist stages of ego development, while foreclosure and diffusion women were more likely to be rated at lower, conformist ego stages. The various conflicting results with regard to identity status in women have yet to be explained adequately, and the fact that most of the research on female identity has occurred during a cultural transition period - the 1970's and 80's, during which time attitudes towards women and their potential have been changing rapidly - serves to complicate the issue further.

According to Erikson (1968), the development of intimacy in men is

dependent upon the successful resolution of the identity versus identity confusion crisis of adolescence. Thus, males are thought to require a firm sense of their own identity before they are able to enter into an intimate relationship with another person. Women, however, are hypothesized by Erikson (1968) to have an incomplete resolution of the adolescent identity crisis until they have been able to establish an intimate relationship with another person. Erikson's position, therefore, suggests that intimacy is a necessary prerequisite for identity achievement in women, while the reverse is true for males.

Granted that something in the young woman's identity must keep itself open for the peculiarities of the man to be joined and of the children to be brought up, I think that much of a young woman's identity is already defined in her kind of attractiveness and in the selective nature of her search for the man (or men) by whom she wishes to be sought (1968, p. 283).

This assertion highlights the importance of interpersonal issues in female identity development and suggests that there may be sex differences in the relationship between intimacy and identity status.

To operationalize the concept of intimacy, Orlofsky, Marcia, and Lesser (1973) developed a semi-structured interview assessing the presence of relationships, the degree of depth and openness in relationships, and the extent of the individual's commitment to relationships in his or her life. This measure was designed as a means to classify people into one of five intimacy statuses: (1) the isolate person has few or no interpersonal relationships in her life; (2) the stereotyped individual is generally friendly and pleasant, although his relationships with others tend to be shallow and conventional; (3) the pseudointimate person is like the stereotyped individual, except that the pseudointi-

mate person is involved in a relatively long-standing sexual relationship, which is based more on conventional roles than on a need for deep, interpersonal communication and sharing; (4) preintimate individuals tend to have close relationships with others, characterized by the mutual sharing of deep feelings and concerns, although these people are uncertain about committing themselves to an enduring sexual relationship; and (5) intimate persons are like preintimate individuals, except that intimate people have been able to commit themselves to a long-standing sexual relationship. Orlofsky (1976) has shown that high intimacy persons (i.e., preintimate and intimate) tend to know their friends better and are better able to predict their friends' behavior than low intimacy individuals (i.e., isolate, stereotyped, and pseudointimate). Orlofsky and Ginsburg (1981) have shown that intimate and preintimate persons are better able to articulate their emotional experiences than are low intimacy people.

Orlofsky, Marcia, and Lesser (1973) studied the relationship between identity and intimacy status in college males and found that achievement and moratorium subjects were significantly higher in intimacy than foreclosure and diffusion subjects. Achievement subjects tended to have intimate relationships and moratorium subjects were more likely to be preintimate. Likewise, diffusion subjects scored lower on intimacy status than any other group and were more likely to be characterized as isolates than were other subjects. Foreclosure men were more often in the stereotyped and pseudointimate statuses than in any other category. Hodgson and Fischer (1979) studied sex differences in iden-

tity and intimacy development, finding that more women than men fell into the two highest intimacy statuses. They also found that more androgynous males were higher in intimacy than more stereotypically masculine males. Women's standing on traditional femininity, traditional masculinity, and androgyny was not found to have a significant effect on their level of intimacy. Schiedel and Marcia (1985) examined sex differences in the relationship between identity and intimacy. Although they found no sex differences in identity status, they did find that women were more likely to be in the higher intimacy statuses than were men. Their study also revealed positive relationships between age and identity status and age and intimacy status for men, although these relationships were not observed among the women. They also found that high identity status was associated with high intimacy status for both sexes. Schiedel and Marcia observed that, while there were very few men who were both high in intimacy and low in identity status, many of the women exhibited this pattern. High identity subjects were also found to be higher in traditional masculinity, regardless of gender, than were low identity subjects. High intimacy males scored higher on traditional femininity than did low intimacy males. Finally, androgynous subjects of both sexes were more likely to be rated as high in both intimacy and identity than were nonandrogynous subjects.

Tesch and Whitbourne (1982) also looked at sex differences in identity and intimacy development. They found that subjects in the intimate status were most often classified as identity achievement in the areas of religion, politics, and sex-roles. Similarly, subjects

rated as isolates were more likely to be classified as diffuse in the areas of religion, politics, and sex-roles. Identity status with respect to occupation did not predict subjects' intimacy status. Subjects who were foreclosed in the area of sex-roles were more likely to be classified as pseudointimate. The authors found no significant sex differences in the relationship between intimacy and identity status, and found no sex differences with regard to intimacy or identity status when these variables were studied separately. With exception of the study by Tesch and Whitbourne (1982), the results cited above are consistent with Erikson's theory regarding the differential pattern of identity and intimacy resolution for males and females.

In spite of the sex differences mentioned above, studies of identity have generally found more similarities than differences between men and women. The major differences between men and women seem to be related to two phenomena. First of all, women tend to rely more heavily on interpersonal issues in defining their identities, while men seem to focus more on occupational and ideological concerns in identity development. Secondly, resolution of the identity and intimacy crises seems to follow different developmental sequences for men and women. That is, the phases of identity and intimacy seem to be merged for women, causing women to take somewhat longer than men to resolve the identity crisis. Conversely, the stages of identity and intimacy are more distinct for men and they tend to establish a firm identity prior to developing more intimate relationships. Thus, men seem to take longer than women to resolve the intimacy crisis (Hopkins, 1983).


### Developmental Factors

Erikson states that the individual must successfully resolve the four crises of childhood before he or she can address the identity crisis of adolescence. Constantinople (1969) developed the Inventory of Psychosocial Development to assess the personality elements associated with each of the stages in Erikson's epigenetic theory of psychosocial development. Using this instrument with samples of undergraduates, she observed that there were significant correlations between scores on the Stage 5 scale (identity vs. identity diffusion) and scores on each of the earlier stage scales. Rothman (1978) performed a similar study with college students using the Rasmussen Ego Identity Scale. He found that subjects in each of the identity statuses could be best discriminated from one another by their scores on the Autonomy and Industry scales. Rothman also observed that subjects in the identity diffusion status obtained the lowest scores on each of the early stage scales, although no clear pattern was found to exist among the other identity statuses. These findings appear to support Erikson's notion of the epigenetic process of identity development.

The importance of crisis as a prerequisite for psychological growth has been cited by a number of researchers and theorists (e.g., Josselson, Greenberger, & McConochie, 1977; Waterman, 1982). In Young man Luther, Erikson (1958) calls upon William James' distinction between those individuals who are "once born" and people who experience a growth crisis or "second birth" in the shaping of their identity. According to Erikson, "once born" persons simply apply their childhood identifica-

tions to adult experience without undergoing any serious doubt or conflict. Thus, these individuals have little trouble finding a place for themselves in society. "Twice born" people, in contrast, have experienced a crisis in purpose or belief, and their adult commitments are the result of a conscious personal choice among alternatives (Waterman, 1982). In a phenomenological study of adolescent development in females, Josselson, Greenberger, and McConochie (1977) observed that one of the characteristics distinguishing high maturity adolescent girls (roughly equivalent to Marcia's achievement and moratorium statuses) from low maturity girls (analogous to Marcia's foreclosure and diffusion statuses) was the presence of crises or conflicts in their life stories. Josselson et al. noted a conspicuous absence of crisis in the life stories of low maturity girls, in comparison to self-reports of crisis and subsequent psychological growth observed in high maturity adolescent girls.

Josselson (1982) also studied the relationship between women's early memories and identity status. Utilizing Mayman's (1968) categorization of early memories according to Freud's stages of psychosexual development, Josselson found that, while foreclosure and diffusion subjects tended to show an even distribution of memories from pre-Oedipal and later stages, moratorium women drew more of their early memories from the phallic and Oedipal phases of development. Achievement subjects typically focused on memories from the later phases of psychosexual development, although they were not as extreme as the moratorium subjects in this regard. Moreover, identity achievement women described





more "blend memories," involving themes from two different phases of development, than did other subjects. According to Josselson, these findings reflect the themes which are most salient to women in each of the four identity statuses. Given that foreclosure individuals tend to rely heavily upon parental influence in their identity formation, it is not surprising that the early memories of these subjects reflect a concern with issues of security, dependency, and trust. Similarly, moratorium subjects, who are actively engaged in the process of exploring the various identity alternatives available to them, show a preoccupation with their ability to function autonomously in the descriptions of their early memories. Achievement subjects, having arrived at a relatively stable self-definition, seem to have been able to integrate their needs for relatedness with their needs for self-expression, and this integration is reflected in their early memories which incorporate elements from several distinct developmental phases (e.g., a blend memory in which security (an oral theme) is seen as the basis for autonomous functioning (a phallic-locomotor theme)). In all cases, it would appear that the identity issues with which the individual is presently coping are clearly reflected in those memories from the past that stand out as being particularly salient to them at the moment. What emerges from these data is an apparent attempt on the part of subjects to draw parallels between the issues or situations that were significant to them during early childhood and the concerns that they are presently facing as young adults. Identity diffusion subjects are not as clearly understood in this regard, and this problem is thought to be due, at least in part,

to the lack of homogeneity among subjects in this identity status (Josselson, 1982).

Family relationships and parenting styles have been studied with regard to their influence on identity development. As one might expect, foreclosure individuals report having the closest relationships with their families (Marcia, 1980; Waterman, 1982). Foreclosure children see their parents in a positive light and report that their families are child-centered. Foreclosure sons tend to see their fathers as dominating and intrusive, while foreclosure daughters describe their fathers as supportive and encouraging. In spite of the somewhat conflictual nature of the relationship between foreclosure sons and their fathers, foreclosure sons are more willing than males in the other statuses to involve their parents in making major life decisions (Bourne, 1978a). Parents of identity diffusion adolescents are viewed by their children as being detached, indifferent, and rejecting. This theme is particularly salient in the relationship between identity diffuse sons and their fathers. Thus, identity diffusions of both sexes are more likely to report feeling unattached and distant from their families than individuals in other identity statuses (Bourne, 1978a; Marcia, 1980; Waterman, 1982). Moratorium subjects report an ambivalent relationship with their parents, seeing their parents as both rejecting and accepting. Researchers have reported large discrepancies between parents' and adolescents' views of parental behavior and attitudes. In general, moratorium persons tend to describe their relationship with their families as conflictual. Like moratoriums, achievement individuals perceive their

parents ambivalently, although the degree of conflict between achievement adolescents and their families is reported as being more moderate than that described by moratorium adolescents (Bourne, 1978a; Marcia, 1980; Waterman, 1982).

Family stability has also been studied as a possible influence on adolescent identity development. Oshman and Manosevitz (1976) observed that college men whose fathers had been absent since the time their sons were about ten years old scored significantly lower on the Rasmussen Ego Identity Scale than did sons from intact families or those in which the mother had remarried. In a sample of high school females, however, St. Clair and Day (1979) observed that two-thirds of the identity achievement subjects came from homes that had been disrupted by either divorce or the death of a parent, whereas fewer than 20% of subjects in the other three identity statuses had come from broken homes. Grossman, Shea, and Adams (1980) found that male college students whose parents had gotten divorced scored higher on Marcia's Ego Identity-Incomplete Sentences Blank than did men from intact families or women from either broken or intact families. In light of the conflicting findings from studies of family stability, it is difficult to determine the effect of family cohesiveness on identity development in adolescents. It is likely that the resources available to the adolescent for coping with parental discord play a role in the adolescent's ability to adjust to adverse circumstances, although this variable has not been addressed in the literature on identity development.

Because identity formation is considered to be a lifelong process

involving crisis, commitment, and subsequent revision in the face of new crises (Erikson, 1968; Marcia, 1980), Marcia's identity statuses must be viewed as descriptions of the individual's identity at a particular point in time, rather than as enduring characteristics of the person. Theorists have generally conceptualized identity development as a gradual upward progression, whereby the maturing individual goes from a state of identity diffusion into moratorium, where the various alternatives available to the person are explored, and then finally the individual achieves identity by committing him- or herself to a particular self-definition. In this developmental sequence, foreclosure is considered to be an early and immature identity status (Waterman, 1982). It is, however, important to note that people can move backward, as well as forward, in this sequence. For example, an individual classified as identity achievement at one point might, upon encountering a new life situation or crisis, revert to a state of moratorium if his or her prior resolution of the identity crisis proves insufficient for dealing with this new scenario. According to Marcia (1980), each new crisis and its subsequent resolution should serve to strengthen one's identity, although regardless of this strength it is unlikely that anyone ever reaches a point in their lives at which they are completely immune to crisis.

Several studies have indicated that the greatest strides in identity development occur during the college years. Stark and Traxler (1974) studied male and female college students in two age groups, 17 to 20 and 21 to 24, and observed that subjects in the 21- to 24-year old

group had significantly higher ego identity scores than subjects in the 17- to 20-year old group. In addition, freshman subjects were more likely to be rated as identity diffuse than were seniors. Waterman, Geary, and Waterman (1974) did a longitudinal study of changes in ego identity status among males between freshman and senior year in college. They found that subjects tended to progress out of the lower statuses and toward identity achievement over the four years of college. Furthermore, the identity achievement status appeared to be the most stable of all of the statuses over time. In contrast, the moratorium status was found to be the least stable of the statuses over the four-year period, and most of the subjects rated as moratorium during their freshman year were found to be in either the identity achievement or diffusion status by their senior year. In another longitudinal study, Adams and Fitch (1982) observed college freshmen, sophomores, and juniors over a one-year period and found results consistent with those cited above. More specifically, subjects tended to move out of the diffusion and foreclosure statuses, and into the moratorium and achievement statuses during the course of the study. Several theorists have suggested that college is a period of psychosocial moratorium, allowing young people to explore a variety of different lifestyles and ways of thinking before having to make the relatively more enduring commitments required of adults in our society (e.g., Waterman, 1982). Munro and Adams (1977) looked at identity development in a sample of college students and working young people between the ages of 18 and 21. They found that the college students in their sample were more likely to be

in either the moratorium or diffusion status than in the foreclosure or achievement status. Among the working subjects, identity achievement persons significantly outnumbered diffusion subjects. There were no significant differences between the college and working groups with regard to identity status in the area of occupation, and most subjects were rated as moratorium or achievement in this content area. In the areas of religion and politics, however, workers tended to be in the achievement or moratorium statuses, while students were more likely to be rated as moratorium or diffusion in these areas. Thus, it would appear that the closer one gets to the reality of the working world, the more likely one is to advance in the process of identity development.

Identity development during the adult years has not been studied as extensively as identity development during the college years. Whitbourne and Waterman (1979) studied male and female college students and then contacted them ten years later for a follow-up assessment of identity status. They found that a large proportion of their alumni sample had moved into the higher identity statuses at the time of follow-up. O'Connell (1976) studied identity development in married women with school-aged children. She divided her sample into three categories: traditional women (full-time homemakers); neotraditional women (those who returned to full-time work when their children reached school-age); and nontraditional women (those who had managed to maintain full-time employment while raising children). O'Connell observed that traditional and neotraditional women seemed to experience a hiatus in personal identity development between the time of marriage and the time when their

children went to school, while nontraditional women showed a more consistent and uninterrupted process of identity development. Apparently, the traditional and neotraditional women view their identity as defined vis-a-vis their relationships with others during the early years of marriage and childrearing, and do not tend to focus on themselves as autonomous individuals until others become less dependent upon them. In contrast, nontraditional women seem to maintain an awareness of their skills and abilities to function independently regardless of the status of their relationships with others. O'Connell's findings are particularly interesting in light of Josselson's (1982) observation that foreclosure and diffusion women tend to express more early developmental themes, such as needs for security and dependency, in their memories from childhood. Moratorium women, on the other hand, are often preoccupied with achievement themes and issues related to their abilities, and achievement women demonstrate an integrated balance of needs for both assertion and relatedness. If one were to combine O'Connell's (1976) and Josselson's (1982) observations, it might be expected that women in the higher identity statuses (achievement and moratorium) would be less traditional than foreclosure and diffusion women. Unfortunately, Schenkel's (1975) finding that achievement and moratorium college women tended to be more traditional than foreclosure and diffusion women contradicts this assumption, and illustrates some of the complexity involved in the study of female identity formation.

### The Life Story

The autobiographies of extraordinary (and extraordinarily self-perceptive) individuals are a suggestive source of insight into the development of identity. In order to find an anchor point for the discussion of the universal genetics of identity, however, it would be well to trace its development through the life histories or through significant life episodes of "ordinary" individuals -- individuals whose lives have neither become professional autobiographies (as did Shaw's) nor case histories... (Erikson, 1959, p. 110).

Erikson's emphasis on the life story as a vehicle for studying identity development echoes the basic tenet of the personological approach to the understanding of human nature. Personology, as originally formulated in the work of Henry Murray (1938; 1955), emphasizes the study of the whole person within a particular social and historical context (McAdams, 1985). Thus, biography is one of the central tools in the study of lives from a personological perspective. Personology was a popular mode of investigation during the 1930's and up until the end of World War II. Murray championed the holistic study of human lives and personality in his work at the Harvard Psychological Clinic during the early half of the 20th century. Erikson was one of Murray's associates in this endeavor, and Erikson's subsequent biographies of famous individuals indicate that he was strongly influenced by Murray's personological methodology. During the 1950's and 60's, idiographic approaches to the study of personality and behavior were criticized for being "unscientific," lacking in rigor, generalizability, and quantifiability (McAdams, 1985). As a result of these attacks, personology fell out of favor in the social sciences, and more quantitative nomothetic approaches became increasingly popular in psychology. That is, the



study of specific traits and personality dimensions came to replace the more intensive studies of the whole person. The late 1960's and early 70's witnessed, however, a revitalized interest in the study of the whole person. Consequently, personology has recently enjoyed a renaissance within the social sciences, and the use of biography as a tool for understanding human lives is becoming popular again (Carlson, 1971; McAdams, 1985).

Since identity has been conceived of as a rich and complex construct, it seems only reasonable to approach the empirical study of identity with a methodology that is capable of encompassing the many nuances and vicissitudes of an individual's life. In fact, one of the more cogent metaphors that has been proposed to explain identity is that of the life story (McAdams, 1985):

The story is the answer to the questions, "Who am I?" and "How do I fit into an adult world?" Identity is a life story (p. 18).

This conceptualization of identity supports Erikson's notion of identity as a configuration that bridges the gap between who the individual was in the past, who she is at present, and who she might be in the future. Moreover, McAdams' metaphor casts the individual into the role of a storyteller, integrating the various aspects of his experience into a coherent narrative that is his identity. It is particularly important to note that the life story, as it is being used in the present context, is not intended to imply a perfectly accurate recapitulation of an individual's personal history. Rather, the life story is thought to represent a subjective account of the individual's past based on how she defines herself in the present. Identity, then, provides the framework by which

we are able to organize the various disparate elements of our past into an integrated narrative that makes sense to us in the here-and-now and gives meaning and purpose to what we hope to become in the future (McAdams, 1985).

The idea that autobiographical memory is primarily reconstructive has received a considerable amount of support in the psychological literature (Cohler, 1982; Hankiss, 1981; Mayman, 1968; McAdams, 1985; Olney, 1972). In discussing Leonardo da Vinci's earliest memory of a vulture flying into his bedroom and perching on his bed, Freud (1910) draws the distinction between childhood memories, which are likely to be fantasy productions, and memories from adulthood, which are more likely to represent actual events:

Quite unlike conscious memories from the time of maturity, (childhood memories) are not fixed at the moment of being experienced and afterwards repeated, but are only elicited at a later age when childhood is already past; in the process, they are altered and falsified, and are put in the service of later trends, so that generally speaking, they cannot be sharply distinguished from fantasies (1910, p. 83).

Like Freud, Alfred Adler also made the observation that early memories are symbolic representations of a person's lifestyle (Ansbacher, 1947). In discussing the relationship between early memories and character structure, Mayman (1968) suggests that "early memories are selected (unconsciously) by a person to conform with and confirm ingrained images of himself and others" (p. 304). Mayman cites the fact that people often describe their early memories as though they were looking on from above and watching themselves act out a scene as evidence for the reconstructive nature of early memories about the self. The notion of remem-

bering first-person experiences from a third-person perspective does seem to suggest that one is "looking back" on the past from the viewpoint of the present. Bertram Cohler (1982) refers to "the personal narrative as order which is imposed upon a developmental course inherently unpredictable" (p. 206). Cohler goes on to suggest that individuals construct their personal narratives with the specific purpose of conveying a life course that is understandable and internally consistent.

From this perspective, there are no events or facts regarding lives which are independent of interpretations which are made of them -- just as, in studying history more generally, concern is with the adequacy of the narrative or interpretation, rather than with the actuality of the events (p. 228).

Thus, it would appear that the widely held notion that our past is important in understanding who we are in the present needs to be expanded to include the reverse idea, that who we are now is significant in determining how we view our past.

Within the realm of personological research, the life story and its components, such as nuclear scenes and scripts (Tomkins, 1978), have received a considerable amount of attention. According to Carlson and Carlson (1984), "a scene is an organized whole, a representation of an idealized event (real or imagined) that includes people, setting, time, place, actions, affects, and psychological functions" (p. 36). Much of the research on nuclear scenes has focused on the emotional content of such episodes (e.g., Carlson, 1981; Carlson & Carlson, 1984) and how these events fit together to form a particular "script" within the life story. In keeping with the reconstructive nature of autobiographical

memory, Carlson and Carlson (1984) suggest that, "Initially, scenes determine scripts; over time, script formation so consolidates experience that scripts come to determine scenes" (p. 37). Sylvan Tomkins' (1978) "script theory" addresses "the individual's rules for predicting, interpreting, responding to, and controlling experiences governed by a "family" of related scenes" (Carlson, 1981, p. 502). More specifically, script theory is based on the idea of psychological magnification, whereby scenes involving positive affect are recalled by a different process than those which are associated with more negative affect. Tomkins (1978) suggests that positive scenes are elaborated through the formation of "variants," such that the differences between various episodes involving positive affect are highlighted by the individual. In contrast, scenes producing negative affect are often magnified by the formation of "analogs," and the individual tends to focus on the similarities between such occurrences, rather than the differences. One of the few studies to address sex differences in the creation of scenes dealing with specific emotions (Carlson & Carlson, 1984) revealed that women tend to produce more interpersonal themes in their stories than men. With regard to plot resolution, these investigators found that females were more likely to have positive endings to their stories than were males.

Expanding upon Tomkins' (1978) notion of nuclear scenes as the structural elements of the life story or script, McAdams (1985) conceptualizes "nuclear episodes" as one of the several components of identity in his life-story model. In this framework, nuclear episodes are sig-

nificant events within an individual's life story that are circumscribed in time and space, and appear to be particularly meaningful to the person's understanding of who they are and how they fit into the world. Turning points or "episodes of transformation" (McAdams, 1985) are thought to signify the transition from one chapter to the next in the life story, marking the point whereby the individual realizes that he or she is somehow different from the way he or she was in the past. In contrast, episodes of continuity do not indicate a change of direction within the life story, but rather, such episodes serve to reaffirm and capture the consistency in the individual's sense of identity. It has been suggested that crisis and change are important variables in psychological growth. For example, Erikson's (1959) stage theory of psychosocial development depicts development as the progression through a series of stage-specific conflicts, such that the successful resolution of one crisis allows the individual to move on to the next stage with its inherent conflict. Josselson, Greenberger, and McConochie (1977) looked at the differences between high and low maturity adolescent females, and observed that high maturity females described more conflicts in their life stories than did low maturity females. Moreover, high maturity girls seemed to have a greater capacity to cope with internal conflict and described themselves as having grown and changed as a result of crisis experiences, while low maturity girls did not report having experienced many events that had caused them to reflect upon themselves and their lives as changing or growing. Finally, the authors noted that high maturity girls tended to be at higher stages of ego development

(post-conformist conscientious and above), while low maturity girls were more likely to be at lower stages of ego development (conformist and below). McAdams (1985) collected nuclear episodes from a sample of mid-life adults and coded them according to whether or not they were turning points within subjects' life stories. He found that individuals who were at higher stages of ego development, as assessed via Loewinger's (1976) sentence completion test (WUSCT), reported significantly more turning point nuclear episodes than did individuals at lower stages of ego development. Ego stage was not found to be related to the number of nuclear episodes reported by subjects, and no sex differences were found with regard to the relationship between turning points and ego development.

#### Identity and the Life Story: Hypotheses

The present study is perhaps closest in nature to that of McAdams (1985), and is an attempt to assess how the extent and types of changes involved in a group of nuclear episodes is related to the individual's present identity status and ego stage. Young adult females are the focus of the present investigation. The major hypothesis is that identity achievement and moratorium women will reveal a greater number of turning point nuclear episodes, as opposed to foreclosure and diffusion women, who are expected to show more episodes of a continuous nature. Although there has been some controversy over whether moratorium or foreclosure status is more adaptive for women (e.g., Marcia, 1980), the focus of the present study is on crisis and change in subjects' life stories, and thus it is expected that subjects will cluster according to

the presence or absence of crisis or exploration (i.e., achievement and moratorium vs. foreclosure and diffusion). It is also assumed that individuals who are in either the identity achievement or moratorium statuses will be at higher levels of ego development than subjects in either of the other two statuses. This latter hypothesis would be a replication of Ginsburg and Orlofsky's (1981) findings with regard to the relationship between ego stage and identity status in college women. It is also expected that the present study will serve to replicate and validate McAdams' (1985) findings concerning the relationship between turning point nuclear episodes and ego development. That is, women who report more turning point nuclear episodes should be at higher stages of ego development than those who report more episodes of continuity. Finally, since identity status in the areas of religion and sex-roles has been found to yield greater differentiation among female subjects on various dependent measures (e.g., Schenkel & Marcia, 1972), it is hypothesized that identity status in the areas of religion and sex-roles will have a more powerful effect with regard to the relationships specified above, than will identity status in the areas of occupation and friendships.

## CHAPTER II

### METHODS

#### Subjects and Subject Recruitment

Subjects for the present study were recruited from the campus of Loyola University of Chicago between November of 1983 and November of 1984. Women between the ages of 20 and 35 were recruited in one of two ways. The author announced the present study in several upper level psychology courses, describing it as "an investigation of identity development in young adult women." Potential subjects were told that this study would consist of one individual session, involving two separate interviews ("one asking you to describe several significant life experiences and the meaning that they have had for you, and one asking you to discuss your attitudes towards issues such as occupation, religion, friendships, and sex-roles") and two brief questionnaires, lasting approximately 1 1/2 to 2 hours. Participation was voluntary and the only incentive offered to these subjects was the opportunity to gain educational experience and exposure to methods of psychological research. The remainder of the sample was recruited from students enrolled in Psychology 101 via Loyola's subject pool. The author announced this study in each of the Psychology 101 classes and asked interested students to leave their name and phone number in a folder that was left on a table outside of the office of the Psychology Depart-



ment. The Psychology 101 students who took part in this experiment received course credits for their participation (1 credit per each 50 minutes of subject time). Thus, women in these classes were told that they could receive between two and three credits for participating in the present study. (See Appendix, p. 120 for the information provided to subjects in this folder). Subjects were later contacted by phone to set up appointments for participation.

Of the 68 potential subjects who signed up for this study, 40 were ultimately selected for participation, based on age and gender criteria, as well as the flexibility of their schedules. Twenty-one of the subjects were enrolled in Psychology 101 and 19 of the subjects were recruited from upper level psychology courses at Loyola. Age was calculated to the day, by subtracting subjects' date of birth from the date on which they participated in this study. The mean age of participants was 21.85 years (21 years, 10 months, and 6 days). The ages of subjects ranged from 20.02 years to 35.01 years. Thirty-eight of the subjects were between the ages of 20.02 years and 23.78 years, and the remaining two subjects were 33.23 and 35.01 years of age, respectively. With regard to education, three of the subjects were college freshmen (7.5%), nine were sophomores (22.5%), 13 were juniors (32.5%), 14 were seniors (35%), and one was a first-year graduate student in psychology (2.5%). Thirty-seven of the subjects were single (92.5%) and three subjects were married (7.5%). Twenty-three subjects were Catholic (57.5%), six subjects were Protestant (15%), one subject was Jewish (2.5%), six subjects belonged to some other type of religion (15%), and four subjects were

not affiliated with any type of organized religion (10%). Finally, 22 subjects were social science majors (55%), most of them majoring in psychology, 10 subjects were natural science majors (25%), four subjects were humanities majors (10%), three subjects had mixed majors (7.5%), and one subject had not yet chosen a major (2.5%). The demographic information on the participants is summarized in Table 2.1.

### Testing Materials

#### Nuclear Episode Interview

The Nuclear Episode Interview was administered verbally and audio-taped. Subjects were asked to describe ten life events which stood out in their memory as having been especially meaningful or significant in shaping the course of their lives. It was also suggested that subjects choose specific episodes that were circumscribed in time (e.g., "one day..." or "that afternoon..."), as opposed to discussing phases in their development or events that extended over longer periods of time (e.g., "my two-year relationship with Bob"). Furthermore, subjects were asked to provide two of their significant life events from childhood (up to and including age 12), four episodes from adolescence (13 to 18 years), and four from more recent memory (19 to the present). Several questions were presented to subjects in the initial instructions in order to help them to organize their responses (e.g., "how old were you?," "what happened?," "why was this a significant event in your life?," "what were you like before having this experience as opposed to what you were like afterwards?"). Events were presented one at a time,

Table 2.1

Demographic Information

Sample Size: 40 young adult females.

Age Range: 20.02 years to 35.01 years.

Mean Age: 21.85 years (21 years, 10 months, and 6 days).

Standard Deviation for Age: 3.03 years (3 years and 11 days).

Median Age: 20.98 years (20 years, 11 months, and 23 days).

Marital Status: 37 (92.5%) Single  
3 ( 7.5%) Married

Religious Affiliation: 23 (57.5%) Catholic  
6 (15.0%) Protestant  
1 ( 2.5%) Jewish  
6 (15.0%) Other  
4 (10.0%) None

Educational Level: 3 ( 7.5%) Freshmen  
9 (22.5%) Sophomores  
13 (32.5%) Juniors  
14 (35.0%) Seniors  
1 ( 2.5%) First-year Graduate Student

College Major: 22 (55.0%) Social Sciences  
10 (25.0%) Natural Sciences  
4 (10.0%) Humanities  
3 ( 7.5%) Mixed Majors  
1 ( 2.5%) Undeclared

and the tape was stopped in between episodes to allow subjects time to formulate their upcoming descriptions. The interviewer's role in this portion of the procedure was to be attentive, to reflect the subject's feelings, to probe for additional information when necessary, and essentially to facilitate the subject's discussion. Subjects generally took between 45 minutes and one hour to complete this interview.

The purpose of the Nuclear Episode Interview, as it has been used in the present study, is to assess the amount of change in the subject's behavior, cognition, and goal-setting as a result of each episode. More specifically, events are rated according to the extent of change on the three dimensions of behavior, cognition, and goal-setting using a three-point coding system, where 0 = no change, 1 = slight or moderate change, without radically altering the course of the person's life, and 2 = a major transformation, whereby the individual goes from leaning in one direction to leaning in the opposite direction as a result of the episode. Consider the following episode:

I had smoked a pack of cigarettes a day for about ten years. I always knew smoking was bad for me and I had thought about quitting in the past, but I never seemed to get around to it. Two years ago my uncle, who had smoked three packs of Marlboros a day for thirty years, was diagnosed as having lung cancer. I remember very clearly that day I went to visit him in the hospital. He was hooked up to all kinds of machines and couldn't talk. He looked so pitiful and I knew then that he wouldn't live much longer. Seeing him like that really forced me to realize what I was doing to myself by smoking, and I knew that I would have to do something to avoid ending up like that. As I left the hospital that day, I took the cigarettes and matches from my purse and dumped them into the nearest trash can. I haven't smoked since that day.

This episode would be scored as a '2' in the area of behavior, a '1' in the area of cognition, and a '1' in the area of goal-setting. The turn-

ing point rating with regard to behavior is based on the fact that the episode caused the subject to quit a behavior (smoking) that had been relatively strong before the episode. Had the subject stated that she had tried to quit smoking on several occasions prior to this experience, she would have received a rating of 1 in the area of behavior, since the act of trying to quit smoking would not, in that case, be entirely based on the episode cited above. The rating of 1 in the area of cognition is based on the fact that the subject was aware of the risks of smoking prior to the event that she described, and it seemed that the episode mainly served to strengthen this awareness for her. If she had stated that she had been unaware of the risks of smoking before this experience and had never contemplated quitting, she would have received a rating of 2 in the area of cognition. With respect to the area of goal-setting, the rating of 1 is based on the fact that the subject had thought about quitting smoking before this episode. It is inferred from this statement that being a non-smoker was a goal for the subject, albeit a weak one, prior to this experience. The fact that the episode made her realize that she had to take this goal more seriously, in order to avoid ending up in her uncle's position, indicates that the subject's goal of being a non-smoker became stronger as a direct result of this episode.

Subjects receive a total of thirty ratings from the Nuclear Episode Interview (i.e., one rating in each of the three areas of behavior, cognition, and goal-setting for each of the ten episodes described). Since this instrument was devised by the author for use in the present study, its validity has yet to be examined. The author coded all 40 of

the interviews and a trained undergraduate rater independently coded 10 of these interviews. Due to the narrow range of values in the coding system, percentage of exact agreement was used to measure interrater reliability. Interrater reliability for all scores together was 76% (behavior change only = 70%, cognitive change only = 75%, and goal-setting change only = 83%). See Appendix, pp. 123-129 for a copy of the instructions to this interview and a complete description of its coding criteria.

### Episode Summary Form

The Episode Summary Form is a paper-and-pencil measure administered concomitantly with the Nuclear Episode Interview. Subjects are required to complete this form ten times, one time per episode. This form requires subjects to rate how confident they are in their memory for the event described, how important the event was in the course of their lives, how much the event changed their lives, and how long the impact of the event lasted. Subjects indicate their responses to the first three questions by circling a number on a likert-like scale ranging from 1 to 5, where 1 = "not at all" and 5 = "extremely." The question pertaining to the event's length of impact is also rated on a likert-like scale ranging from 1 to 5, where 1 = "less than one week" and 5 = "more than two years." With regard to more recent episodes, subjects are instructed to estimate how long they expect the impact of the event to last and respond accordingly. The purpose of this rating form is to assess the degree of agreement between subjects' ratings of importance and change with those of the objective coder. Subjects were

typically able to complete each Episode Summary Form in less than one minute. See Appendix, p. 131 for a copy of this instrument.

### Identity Status Interview

Grotevant and Cooper's (1981) revised version of Marcia's (1966) Ego Identity Status Interview was used in the present study. The interview was administered verbally and audiotaped. Subjects were asked to describe their experiences and future plans with regard to four content areas: occupation, religion, friendships, and men's and women's roles. Because interpersonal issues have been found to be particularly salient in female identity development (e.g., Douvan & Adelson, 1966; Hodgson & Fischer, 1979; Josselson, Greenberger, & McConochie, 1977; Matteson, 1977), the content areas of friendships and sex-roles were used in conjunction with two of Marcia's (1966) original content areas, occupation and religion, in an attempt to gain a more comprehensive understanding of identity development in young adult women. In each of the content categories, subjects were asked to describe their general views on the issue in question, the people or experiences that have influenced their opinions, the stability of their views in the past, and their expectations with regard to whether their opinions will change or remain the same in the future. The format of the interview was like that of a discussion. The interviewer read questions directly from the manual (Grotevant & Cooper, 1981), reflected the subject's responses, and probed for further information when necessary. This portion of the procedure lasted between 30 and 45 minutes.

In addition to expanding the content areas of Marcia's original

identity interview, Grotevant and Cooper (1981) have also developed more specific coding criteria for assessing identity status. Following up on Matteson's (1977) observation that identity development may proceed at different rates depending upon the content area in question, Grotevant, Thorbecke, and Meyer (1982) suggest that identity status in each content area should be assessed separately, rather than calculating an overall identity status by combining all of the content areas together (Marcia, 1966). Similarly, Grotevant et al. (1982) have elaborated on Marcia's scheme for coding the presence or absence of exploration and commitment, by developing a system to assess both the presence and degree of these two dimensions of identity development in subjects' responses. Exploration is evaluated on the basis of both the extent to which a subject has explored a given alternative (depth of exploration) and the number of different options considered by the subject (breadth of exploration). Using a four-point scale, subjects receive a rating of 4 on exploration if their responses indicate both depth and breadth of exploration. Subjects receive a rating of 3 if they have only explored one option in depth or several options with little depth. A rating of 2 is given if the subject shows only superficial exploration, with little depth or breadth, and subjects receive a rating of 1 if they show a complete absence of exploration in a particular content area. Commitment is also scored on a four-point scale, ranging from 1 (complete absence of commitment), 2 (weak or vague commitment), 3 (moderate commitment), to 4 (strong commitment - the subject is certain of her choice and describes her position on an issue as stable and unlikely to undergo profound



change in the future).

Identity status is calculated for each content area on the basis of subjects' scores for both exploration and commitment. That is, identity achievers are those subjects who receive scores in the 3-4 range on both exploration and commitment. Moratorium subjects are those who receive scores in the 3-4 range on exploration and the 1-2 range on commitment. Foreclosure subjects are individuals who score in the 1-2 range on exploration and the 3-4 range on commitment, and identity diffuse subjects are those who score in the 1-2 range on both exploration and commitment.

A trained female graduate-student coder rated exploration and commitment in each of the four content areas for all 40 of the interviews, and the author coded five of these interviews independently. Marcia (1966; 1980) and most subsequent researchers have calculated interrater reliability by looking at the percentage of agreement with regard to identity status ratings (either overall or in particular content areas). Because the data derived from this instrument is relatively subjective and open to interpretation, percentage agreement has typically fallen between 70 and 80% (Marcia, 1966; 1980). Interrater reliability for identity status ratings with all content areas considered together was 85% (Cohen's Kappa = 0.83). Percentage agreement for each of the content areas was as follows: occupation - 100% (Cohen's Kappa = 1.00); religion - 80% (Cohen's Kappa = 0.73); friendships - 80% (Cohen's Kappa = 0.73); and sex-roles - 80% (Cohen's Kappa = 0.73).

Grotevant, Thorbecke, and Meyer (1982) have suggested more strin-

gent criteria for evaluating interrater reliability, based on the percentage of exact agreement among coders on the four-point scales of exploration and commitment in each of the content areas. Using a sample of 40 female adolescents, these investigators arrived at an overall percentage agreement of 70.4% (Grotevant, Thorbecke, & Meyer, 1982). In the present study, percentage of exact agreement among all ratings was 70% (Cohen's Kappa = 0.60). For exploration ratings alone, percentage of exact agreement was 75%. Percentage of exact agreement with regard to commitment ratings was 65%. These findings are similar to those of Grotevant et al. (1982), who found percentages of exact agreement for exploration and commitment to be 72.1% and 66.3% respectively (p. 44). See Appendix, pp. 134-135 for a copy of the questions asked in the Identity Status Interview.

#### Washington University Sentence Completion Test

According to Loevinger (1966; 1973; 1976), ego development refers to the gradually increasing complexity with which the individual is able to conceptualize and integrate his/her experiences. In her structural developmental model, Loevinger describes ego stages along a continuum, ranging from simplistic and global understandings of the world and experience to extremely complex and hierarchically-integrated views of experience. Ego development has typically been measured using subjects' responses to the Washington University Sentence Completion Test (WUSCT). Holt (1980) devised an abbreviated 12-item version of Loevinger's (1976; Loevinger, Wessler, & Redmore, 1978) WUSCT, which has been used in the present study. The WUSCT is a paper-and-pencil measure, and subjects

are asked to complete the 12 sentence stems in any way that they choose. There is no time limit for this task, although subjects are usually able to complete this instrument within 15 to 20 minutes. Each sentence response is scored for one of the stages of ego development, and then the scores for each of the 12 responses are combined according to "ogive rules" (Loevinger & Wessler, 1978) to arrive at the subject's overall stage of ego development. Holt (1980) has provided ogive rules for the 12-item version of the WUSCT. In the present study, responses were scored by a trained female graduate-student coder, according to the scoring manual for female subjects published by Loevinger, Wessler, and Redmore (1978). See Appendix, pp. 132-133, for a copy of this instrument and descriptions of the different ego stages.

### Procedure

Each subject was interviewed individually. The subject was greeted by the experimenter and asked to complete the Informed Consent Form (see Appendix, p. 121, for a copy of this document) upon arrival. The author briefly described the experimental procedure at this point and invited the subject to ask any questions that she might have with regard to the study. Once the subject had completed the Informed Consent Form, she was asked to fill out a demographic information form (see Appendix, p. 122). The author then read the instructions for the Nuclear Episode Interview (see Appendix, pp. 123-124) and prepared the audiotaping equipment for this portion of the session, while the subject was formulating her initial responses. After the subject reported her first nuclear episode, she was presented with the Episode Summary Forms

and instructed to complete the first form at this point and subsequent forms at the conclusion of her descriptions of each nuclear episode. Upon completion of the Nuclear Episode Interview, the subject was asked to complete the Washington University Sentence Completion Test (see Appendix, p. 132). Once the subject had done this, the Identity Status Interview was administered and audiotaped. At the conclusion of the session, the experimenter debriefed the subject with regard to the theoretical basis of the study and the general experimental hypotheses. No personal feedback was provided to the subject at this or any other point in the experimental procedure. The subject was thanked for her participation and, if appropriate (i.e., if the subject was enrolled in Psychology 101), information regarding the number of credits earned for participation was discussed. The entire procedure lasted for approximately 1 1/2 to 2 hours.

## CHAPTER III

### RESULTS

This chapter is divided into three sections based on the three main variables of interest in this investigation: identity status, ego development, and nuclear episodes. The first section focuses on analyses and results concerning the relationship between identity variables and ego development. The second section describes the analyses and results with respect to the relationship between identity variables and nuclear episode variables, and the third and final section focuses on the relationship between ego development and nuclear episode variables. Since there were no missing data for any of the subjects in this sample, all analyses are based on a sample size of 40. In addition, the probabilities associated with all of the correlation coefficients reported in this chapter are based on two-tailed tests of statistical significance.

In order to determine whether the method of subject recruitment had an effect on the results of this investigation, subjects who were recruited through Loyola's Psychology 101 subject pool (i.e., those who were receiving course credit for their participation) were compared with subjects who were recruited through upper level psychology classes at Loyola (i.e., those who were not receiving any tangible inducement for their participation) in a series of t-tests, using subjects' scores on

the various measures of interest in this study as the dependent variables. These t-tests revealed no significant differences between the two groups of subjects. Thus, it was concluded that the recruitment practices used did not serve to confound the experimental findings.

### Identity and Ego Development

Frequencies and descriptive statistics on the pertinent identity variables and ego stage immediately revealed one of the major problems of the present investigation. The sample used in this study showed highly skewed distributions on these variables, such that a majority of the subjects were high in both identity status and ego development.

Identity status was calculated for each of the four areas of occupation, religion, friendship, and sex-roles. The modal identity status in each of these areas was identity achievement. In the areas of occupation, religion, and sex-roles, 28 (70.0%) subjects were rated as identity-achieved, and 34 (85.0%) subjects were rated as identity-achieved in the area of friendship. Foreclosure was the second most commonly occurring identity status in the areas of religion, where there were 8 (20.0%) subjects in this status, friendship, with 5 (12.5%) subjects in this status, and sex-roles, with 10 (25.0%) subjects rated as foreclosed. In the area of occupation, the second most frequently occurring identity status was moratorium, with 6 (15.0%) subjects in this status, and only 3 (7.5%) subjects were rated as foreclosed in this area. Moratorium status was relatively rare in the areas of religion and sex-roles, where only 2 (5.0%) subjects were rated as belonging in this status. Only one (2.5%) subject was rated as moratorium in the area of

friendship. There were no identity diffuse subjects in either of the areas of friendship or sex-roles. Three (7.5%) subjects were rated as identity diffuse in the area of occupation, and 2 (5.0%) subjects were rated as identity diffuse in the the area of religion. Frequencies for identity status in each of the four areas are shown in Table 3.1.

Means were calculated for the degree of exploration and commitment in each of the four areas of the Identity Status Interview. There was very little difference among these means, and all of them fell very close to 3, indicating that, on the average, subjects had engaged in a moderate amount of exploration and had been able to make relatively enduring commitments to a particular position in each of the four areas of identity development under investigation. On the average, subjects showed the greatest amount of exploration in the area of friendship ( $\bar{X} = 3.15$ ,  $SD = 0.70$ ) and the least amount of exploration in the area of sex-roles ( $\bar{X} = 2.93$ ,  $SD = 0.66$ ). Similarly, subjects showed the highest average extent of commitment in the area of religion ( $\bar{X} = 3.40$ ,  $SD = 0.67$ ) and the lowest average degree of commitment in the area of occupation ( $\bar{X} = 3.08$ ,  $SD = 0.86$ ). Pearson product-moment correlations were calculated between exploration and commitment in each of the four areas to determine the degree of relationship between the two elements of identity status. Correlations between exploration and commitment were positive and significant in the areas of occupation ( $r = .32$ ,  $p < .05$ ) and friendship ( $r = .39$ ,  $p < .05$ ). Correlations between exploration and commitment were positive, but non-significant, in the areas of religion ( $r = .14$ , ns) and sex-roles ( $r = .14$ , ns). Means for the degree of

Table 3.1

Frequencies for Identity Status in the Four Areas of Occupation, Religion, Friendship, and Sex-Roles

Identity Area	Status			
	Achievement	Moratorium	Foreclosure	Diffusion
Occupation	28 (70.0%)	6 (15.0%)	3 ( 7.5%)	3 (7.5%)
Religion	28 (70.0%)	2 ( 5.0%)	8 (20.0%)	2 (5.0%)
Friendship	34 (85.0%)	1 ( 2.5%)	5 (12.5%)	0 (0.0%)
Sex-Roles	28 (70.0%)	2 ( 5.0%)	10 (25.0%)	0 (0.0%)



exploration and commitment in each of the four areas are shown in Table 3.2.

In chapter 1, several studies were cited in which the investigators had observed that individuals tend to move from the "lower" identity statuses of identity diffusion and foreclosure into the "higher" identity statuses of moratorium and identity achievement as they increase in age (e.g., Adams & Fitch, 1982; Stark & Traxler, 1974; Waterman, Geary, & Waterman, 1974). In order to assess the degree of relationship between age and the identity status variables, Spearman's rho was calculated for the relationships between age and degree of exploration and between age and degree of commitment in each of the four identity status areas. Spearman's rho was selected as the appropriate statistic for use with the age variable, since age was not normally distributed in the present sample. More specifically, 38 of the 40 subjects were between the ages of 20.02 and 23.78 years, while the two remaining subjects were 33.23 and 35.01 years of age, respectively. Thus, Spearman's rho was selected in order to avoid the potential problems that could result from the inclusion of these two outliers in a Pearson product-moment correlation analysis. Positive and significant correlation coefficients were observed for the relationship between age and exploration in each of the four areas assessed by the Identity Status Interview. In contrast, the correlation between age and commitment was not found to be significant in any of the four areas. (See Table 3.3).

Several studies have also indicated that the greatest strides in

Table 3.2

Means, SD's, and Ranges for Commitment and Exploration in Each of the Four Identity Status Areas

Identity Area	Exploration			Commitment			<u>r</u> between exploration and commitment
	$\bar{X}$	SD	Range	$\bar{X}$	SD	Range	
Occupation	3.13	0.72	1-4	3.08	0.86	1-4	.32*
Religion	3.08	0.76	2-4	3.40	0.67	2-4	.14
Friendship	3.15	0.70	1-4	3.38	0.54	2-4	.39*
Sex-Roles	2.93	0.66	2-4	3.35	0.58	2-4	.14

\*  $p < .05$

Table 3.3

Correlations: Age and Year in College by Identity Status Variables

Identity Status Variable	Age <sup>a</sup>	Year in College
Occupation Exploration	.49***	.35*
Occupation Commitment	-.05	-.00
Religion Exploration	.32*	.13
Religion Commitment	.08	.18
Friendship Exploration	.33*	.36*
Friendship Commitment	.20	.03
Sex-Role Exploration	.40*	.51***
Sex-Role Commitment	.16	.16

\*\*\* $p < .001$

\* $p < .05$

<sup>a</sup>Spearman's rank-order correlation coefficient.

identity development occur during the college years (e.g., Stark & Traxler, 1974). In order to determine whether subjects' level of education was related to their level of identity development, Pearson product-moment correlations were performed on the relationship between subjects' year in college and their levels of exploration and commitment in each of the four areas assessed by the Identity Status Interview. Significant positive correlations were obtained for the relationship between college year and exploration in the areas of occupation ( $r = .35$ ,  $p < .03$ ), friendship ( $r = .36$ ,  $p < .03$ ), and sex-roles ( $r = .51$ ,  $p < .001$ ). As with the relationship between age and commitment, there were no significant correlations between college year and commitment in any of the four areas. Correlation matrices for the relationships between age and the identity status variables and college class and the identity status variables are presented in Table 3.3.

In order to assess more carefully how age and year in college were related to identity status, achievement and moratorium subjects were combined to form a "high" identity group, and foreclosure and diffusion subjects were combined to form a "low" identity group in each of the four areas. High and low identity subjects in each area were then compared in a series of t-tests, using age and class as the dependent variables. Although no significant effects were observed for identity status with respect to the age variable, subjects' year in college was related to their identity status in the areas of occupation and sex-roles. More specifically, high identity subjects in the area of occupation tended to be more advanced in their college careers than low iden-

tity subjects in this area ( $t(38) = -1.90$ ,  $p = .065$ ). Similarly, high identity subjects in the area of sex-roles were also at higher educational levels than low identity subjects in this area ( $t(38) = -2.89$ ,  $p = .006$ ). Results from these analyses need to be viewed with some caution, however, since the low identity groups in each area were considerably smaller than the high identity groups. In the area of occupation, only 6 subjects were classified as low identity, while 34 subjects were in the high identity group. In the area of sex-roles, 10 subjects were in the low identity group, as compared to 30 subjects in the high identity group.

The second major variable to be considered in the present investigation was ego development. Subjects were classified into one of six stages or three transitional levels, using the ogive rules described by Loevinger and Wessler (1970). Subjects at the lower (preconformist) stages of ego development have generally been characterized as impulsive (I-2) or self-protective (Delta), and the middle stages have been used to describe those subjects with a conformist orientation (Delta/3, I-3, and I-3/4). The higher (postconformist) levels of ego development are used for those individuals who demonstrate conscientious (I-4 and I-4/5), autonomous (I-5), and integrated (I-6) ego capacities as measured by the WUSCT. In addition, numerical values were assigned to subjects' levels of ego development to allow parametric statistical analyses to be performed on these data. These values ranged from 3 = I-3 (there were no ratings below I-3 in the sample) to 7 = I-5 (there were no I-6 ratings in the sample). The modal ego levels in the present sam-

ple were I-4 (N=14) and I-4/5 (N=13). These results are higher than those found in previous research using the WUSCT, which have shown the I-3/4 transitional level to be the modal ego stage for adults in our culture (e.g., Ginsburg & Orlofsky, 1981; Loevinger, 1976). Because the highest and lowest ego levels represented in the present study contained relatively few subjects, ego stage categories were combined to yield three groups: low ego development - those subjects who were rated as either I-3 or I-3/4 (N=8, 20%); medium ego development - subjects rated as I-4 (N=14, 35%); and high ego development - those subjects classified as either I-4/5 or I-5 (N=18, 45%). Frequencies for each of the levels of ego development and the three combined groups of low, medium, and high ego development are presented in Table 3.4.

As with identity status, ego development has been conceptualized as a variable that increases with age (e.g., Redmore & Loevinger, 1979). In order to determine the relationship between ego development and age, an F-test was performed in which ego development (low, medium, and high) was used as the independent variable and age was the dependent variable. The results of this test were not significant ( $F(2,37) = 0.25$ , ns). A second F-test was performed using year in college as the dependent variable, to determine whether ego development was related to educational level. This analysis revealed that level of ego development was related to subjects' year in college ( $F(2,37) = 3.37$ ,  $p < .05$ ). Subsequent contrasts using Duncan's multiple range procedure revealed that subjects at the medium (I-4) and high (I-4/5 and I-5) levels of ego development had completed more years of undergraduate education than subjects at the

Table 3.4

Frequencies for Ego Development


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I-3	=	3 ( 7.5%)
I-3/4	=	5 (12.5%)
I-4	=	14 (35.0%)
I-4/5	=	13 (32.5%)
I-5	=	5 (12.5%)

---

Low Ego Development (I-3 & I-3/4) = 8 (20%)

Medium Ego Development (I-4) = 14 (35%)

High Ego Development (I-4/5 & I-5)= 18 (45%)

lowest (I-3 and I-3/4) levels of ego development ( $p < .05$ ).

The major hypothesis with regard to the relationship between identity status and ego development is that subjects who are at higher levels of ego development should also be in the higher identity statuses (i.e., identity achievement and moratorium), while subjects who are at lower stages of ego development should show a greater likelihood of being in the lower identity statuses (i.e., foreclosure and identity diffusion). To assess the relationship between ego development and identity status, four chi-square analyses were performed, using the three levels of ego development (low, medium, and high) and identity status (low and high) in each of the four areas of occupation, religion, friendship, and sex-roles. Identity status in the areas of occupation, religion, and friendship was not clearly related to ego level, and none of these three chi-squares reached significance. A significant chi-square was found in the area of sex-roles, indicating that the distribution of subjects across ego levels was significantly related to identity status in this area ( $\chi^2(2) = 9.73$ ,  $p < .01$ ). As predicted, the majority of achievement and moratorium subjects (56.7%) were at post-conformist conscientious and autonomous levels of ego development (I-4/5 and I-5), while half of the subjects rated as foreclosed or identity diffuse in the area of sex-roles were found to be in the lower, conformist stages of ego development (I-3 and I-3/4). Again, it is important to consider these chi-square results with caution, as high identity subjects far outnumber low identity subjects in all areas. For example, in the area of sex-roles, 30 high identity subjects were compared with 10 low iden-



tity subjects over three levels of ego development. Thus, the expected cell frequency was less than 5.0 for three of the six cells (i.e., those pertaining to subjects low in identity status). Chi-square results are presented in Table 3.5.

In order to assess more carefully the relationship between ego development and identity status, a series of F-tests were performed using level of ego development as the independent variable and the degree of exploration and commitment in each of the four identity areas as the dependent variables. Ego development was found to be related to subjects' degree of exploration in the area of occupation ( $F(2,37) = 2.93$ ,  $p = .066$ ). Subsequent contrasts using Duncan's multiple range procedure revealed that subjects at the highest levels of ego development (I-4/5 and I-5) had engaged in significantly more exploratory activities in the area of occupation than had subjects at the lowest (I-3 and I-3/4) levels of ego development ( $p < .05$ ). Similarly, ego development was found to be related to subjects' degree of exploration in the area of sex-roles ( $F(2,37) = 5.94$ ,  $p < .006$ ). Subsequent contrasts using Duncan's multiple range procedure revealed that subjects at the highest levels of ego development (I-4/5 and I-5) had engaged in more exploratory activities in the area of sex-roles than had subjects at the lowest (I-3 and I-3/4) levels of ego development. Results from these F-tests are presented in Table 3.6.

Table 3.5

Chi-Squares: Ego Development by Identity Status in each of the four areas

		<u>Ego Development</u>			Row Total
		Low	Medium	High	
Occupation Identity Status	Low	3	1	2	6
	High	5	13	16	34
Column Total		8	14	18	

$$\chi^2 (2) = 4.07, \text{ ns.}$$

		<u>Ego Development</u>			Row Total
		Low	Medium	High	
Religion Identity Status	Low	4	3	3	10
	High	4	11	15	30
Column Total		8	14	18	

$$\chi^2 (2) = 3.43, \text{ ns.}$$

(continued)

Table 3.5 (continued)

Chi-Squares: Ego Development by Identity Status in each of the four areas

		<u>Ego Development</u>			Row Total
		Low	Medium	High	
Friendship Identity Status	Low	2	1	2	5
	High	6	13	16	35
Column Total		8	14	18	

$$\chi^2 (2) = 1.54, \text{ ns.}$$

		<u>Ego Development</u>			Row Total
		Low	Medium	High	
Sex-Role Identity Status	Low	5	4	1	10
	High	3	10	17	30
Column Total		8	14	18	

$$\chi^2 (2) = 9.73, \underline{p} < .01$$

Table 3.6

Mean Exploration Scores in Four Areas Classified by Ego Development

	<u>Ego Development</u>			<u>F</u>
	Low	High	High	
Occupational Exploration	2.63	3.14	3.33	2.93+
Religious Exploration	2.75	3.29	3.06	1.28
Friendship Exploration	2.88	3.14	3.28	0.41
Sex-Role Exploration	2.38	2.86	3.22	5.94**

+p &lt; .07

\*\*p &lt; .01

### Identity and Nuclear Episodes

Several scores were derived from the Nuclear Episode Interview. For each episode, subjects received a rating of 0, 1, or 2 in each of the three areas of behavior, cognition, and goals. Ratings are essentially qualitative in nature, indicating the type of change resulting from a particular episode, where 0 = no change, 1 = a continuous type of change whereby a given event serves to strengthen or weaken the subject's pre-existing behavior, cognition, or orientation towards a particular goal, and 2 = a turning point whereby the episode causes the subject to replace her pre-existing behavior, cognition, or goals with their opposites. Thus, subjects received a total of thirty scores from the Nuclear Episode Interview (i.e., 3 ratings per each of the 10 episodes).

Prior to pilot-testing this instrument, a "magnitude of change" rating scale was also included in the scoring criteria for the Nuclear Episode Interview. Preliminary ratings of pilot-test data, however, indicated that magnitude of change was almost perfectly correlated with direction (quality) of change. Because the magnitude of change score did not yield additional information, this rating scale was consequently dropped from the scoring system. Since the type of change was so highly correlated with the magnitude of change (e.g., turning points (2's) seem to indicate the highest degree of change, in comparison to continuous changes (1's), which seem to involve only a moderate extent of change), magnitude of change is assumed to be implicit in the ratings for type of change.

In the interest of economy, the ratings derived from the Nuclear Episode Interview were collapsed to yield more meaningful data for analysis. First of all, ratings in each of the three areas of behavior, cognition, and goals were summed separately across the ten episodes to derive extent of change scores in each of these areas. The greatest amount of change was observed in the area of cognition ( $\bar{X}=14.03$ ) and the least amount of change seemed to occur in the area of goal-orientation ( $\bar{X}=4.50$ ). The mean for the total amount of change in behavior was 9.53. A repeated measures F-test was performed to assess whether or not the extent of change differed significantly across the three areas of behavior, cognition, and goal-orientation. This analysis revealed that the differences between the areas with respect to the extent of change were significant ( $F(2,78) = 133.74, p < .001$ ). Subsequent contrasts using repeated measures t-tests revealed that the overall extent of change in the area of cognition was significantly greater than the extent of change in the area of behavior ( $t(39) = 7.98, p < .001$ ), which was in turn greater than the extent of change in the area of goals ( $t(39) = 9.54, p < .001$ ). Overall extent of change was then calculated by taking the sum of all ratings for the Nuclear Episode Interview, revealing the average extent of total change to be 28.05 out of a possible maximum total of 60.00. Type of change was also assessed by calculating the number of 2's, 1's, and 0 ratings that subjects received in each of the three areas over the ten episodes. Subjects received the greatest number of 2 ratings in the area of cognition ( $\bar{X}=5.03$ ) and the smallest number of 2 ratings in the area of goal-orientation ( $\bar{X}=1.20$ ). Continuous

ratings (1's) were also most prevalent in the area of cognition ( $\bar{X}=3.98$ ), while appearing least frequently in the area of goal-orientation ( $\bar{X}=2.10$ ). Ratings of no change (0's) were most common in the area of goal-orientation ( $\bar{X}=6.48$ ) and least common in the area of cognition ( $\bar{X}=0.95$ ). In addition, the total number of 2's, 1's, and 0 ratings was calculated over all three areas, indicating that 0 ratings were the most common ( $\bar{X}=10.75$ ), while 2 ratings were the least prevalent ( $\bar{X}=9.08$ ). Finally, an episode was defined as a turning point if the subject received a rating of 2 in at least two of the three areas of behavior, cognition, and goal-orientation.

These criteria for defining turning point nuclear episodes were chosen for their stringency, in an attempt to distinguish between those episodes in which subjects received only one rating of 2 over three areas (e.g., behavior=2, cognition=1, and goals=1) and those episodes in which subjects received ratings of 2 in two or three of the areas. It was felt that the former type of episode was not a true turning point (e.g., in the example cited above, the episode seems to indicate more changes of a continuous nature (1's), and should more appropriately be viewed as an episode of continuity, rather than a turning point), whereas the latter type of episode shows that the episode produced considerable change in a majority of the areas assessed and its designation as a turning point, therefore, seems more appropriate. It is also important to note that the term, "turning point," has been used to describe episodes as well as ratings. Turning point ratings indicate 2's, and are used in the determination of whether an episode is a turn-

ing point, as defined above, but are not in themselves indicative of turning point nuclear episodes. The range of turning points across subjects extended from 0 to 7. Subjects had an average of 2.33 (standard deviation = 1.53) turning point nuclear episodes in ten episodes using the criteria outlined above. Means for all of the variables derived from the Nuclear Episode Interview are presented in Table 3.7.

In addition to the objective ratings derived from the Nuclear Episode Interview, subjects were asked to indicate on the Episode Summary Forms their perceptions of the accuracy of their memory for each episode, how important the episode was in the course of their lives, the extent to which the episode changed their lives, and how long the impact of the incident lasted. Since the instructions for the Nuclear Episode Interview asked subjects to describe ten "significant life events," it was not surprising to discover that subjects' ratings were relatively high for all four questions. On a scale ranging from 1 to 5, subjects' average ratings confidence in the accuracy of their accounts was 4.69, approximately halfway between 4="pretty sure" and 5="completely confident." Importance was also rated on a 5-point scale, and the mean importance rating given by subjects was 4.11, which is slightly higher than 4= "very important." On the 5-point scale for how much the event changed their lives, subjects gave an average rating of 3.83, which falls on the high end of the range from 3="moderately" to 4="a lot." Finally, the average rating for length of impact was 4.29, which falls between 4="more than one year, but less than two years" and 5="more than two years." Means for subjects' ratings on the four questions of the



Table 3.7

Means, SD's, and Ranges for the Nuclear Episode Data

	<u>Behavior</u>			<u>Cognition</u>			<u>Goals</u>		
	$\bar{X}$	SD	Range	$\bar{X}$	SD	Range	$\bar{X}$	SD	Range
<u>Extent of Change</u> (sum of ratings)	9.53	2.69	4-14	14.03	2.66	8-20	4.50	2.86	0-14
<u>Type of Change:</u>									
# of 2 ratings	2.85	1.39	0-6	5.03	1.92	1-10	1.20	1.31	0-6
# of 1 ratings	3.83	1.71	0-7	3.98	1.56	0-7	2.10	1.57	0-6
# of 0 ratings	3.33	1.77	0-8	0.95	1.06	0-4	6.48	2.14	0-10
<u>Total (Behavior, Cognition, and Goals combined)</u>									
	$\bar{X}$			SD			Range		
<u>Extent of Change</u> (sum of ratings)	28.05			5.85			16-43		
(continued)									

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Table 3.7 (continued)

Means, SD's, and Ranges for the Nuclear Episode

	<u>Total (Behavior, Cognition, and Goals Combined)</u>		
	$\bar{X}$	SD	Range
<u>Type of Change:</u>			
# of 2 ratings	9.08	3.12	5-18
# of 1 ratings	9.90	2.68	4-16
# of 0 ratings	10.75	3.21	5-20

Episode Summary Forms are shown in Table 3.8.

The purpose of the Episode Summary Forms was to evaluate subjects' ratings of importance, change, and extent of impact and use these to assess the amount of agreement between objective measures of change and subjects' perceptions of change. The subjective ratings derived from the Episode Summary Forms were summed over the ten episodes to yield total scores for accuracy, importance, change, and length of impact. Pearson product-moment correlations were then calculated between subjects' ratings derived from the Episode Summary Forms and the various objective measures of change derived from the Nuclear Episode Interview. The number of continuous behavioral changes (i.e., ratings of 1 in the area of behavior) was negatively correlated with the amount of change reported by subjects over all ten episodes ( $\underline{r} = -.32$ ,  $\underline{p} < .05$ ). Similarly, the number of continuous cognitive changes was negatively associated with the sum of importance ratings over the ten episodes ( $\underline{r} = -.30$ ,  $\underline{p} = .06$ ). None of the other correlations approached significance. A careful review of these two instruments suggested that they might be measuring different types of changes. That is, the Episode Summary Forms asked the general question, "How much did this event change your life?" In contrast, scoring of the Nuclear Episode Interview was based on more specific questions, such as, "Did your behavior or way of looking at the world change as a result of this episode, and if so, how?" Because of the lack of agreement between the subjective and objective measures of change, the decision was made to focus primarily on the objective data derived from the Nuclear Episode Interview, although the

Table 3.8

Means, SD's, and Ranges for Subjects' Ratings on the EpisodeSummary Form<sup>a</sup>

	$\bar{X}$	SD	Range
Accuracy	4.69	0.32	3.5-5.0
Importance	4.11	0.36	3.5-4.8
Change	3.83	0.38	3.2-4.6
Length of Impact	4.29	0.56	2.2-5.0

<sup>a</sup>Ratings were calculated by averaging scores over all ten episodes.

subjective ratings derived from the Episode Summary Forms have been included in some of the analyses for exploratory purposes.

One of the first analyses performed on the Nuclear Episode data involved an examination of the relationship between age and the extent and types of changes in subjects' life stories. It was assumed that older subjects would report a greater number of more profound changes than their younger counterparts, if for no other reason than the fact that older subjects should have more events from which to choose. Contrary to expectations, however, Spearman rank-order correlations between age and the extent of change (overall and in each of the three areas of behavior, cognition, and goals), the number of turning point episodes, and the various qualitative ratings for type of change (i.e., number of 2's, 1's, and 0's in each category and overall) revealed no significant relationships between age and the variables derived from the Nuclear Episode Interview.

In a similar set of analyses, the relationship between year in college and the extent and types of changes derived from the nuclear episode data was assessed using Pearson product-moment correlations. Year in college was found to be positively related to the total number of continuous ratings (1's) across the three areas of behavior, cognition, and goal-orientation ( $\underline{r} = .35$ ,  $\underline{p} < .03$ ). A significant negative relationship was observed between year in college and the total number of 'no change' ratings (0's) across all three areas ( $\underline{r} = -.35$ ,  $\underline{p} < .03$ ). There were, however, no other significant relationships found between year in college and the number of turning point episodes or any of the

variables involving the extent of change in subjects' nuclear episodes.

The major hypothesis with regard to the relationship between nuclear episodes and identity was that subjects in the higher identity statuses would have experienced more turning point nuclear episodes than subjects in the lower identity statuses. This hypothesis was based on the assumption that turning points are indicative of the exploratory activities which characterize individuals in the moratorium and identity achievement statuses. To test this hypothesis, a series of Pearson product-moment correlations was performed, using the ratings for exploration and commitment in each of the four areas of occupation, religion, friendship, and sex-roles and relating these to the number of turning point episodes, the extent of change (total and in each of the three areas of behavior, cognition, and goal-orientation), and the various qualitative ratings for type of change (i.e., the number of 2's, 1's, and 0 ratings in each category and overall). Unfortunately, very few of these correlations were found to be significant. The number of turning points (i.e., episodes in which subjects received ratings of 2 in two or more areas) was not found to be related to any of the identity status variables, and thus, the major hypothesis was not supported. The extent of cognitive change (i.e., the sum of all ratings in the area of cognition) was positively correlated with the degree of religious commitment ( $r = .34$ ,  $p < .04$ ). Religious commitment was also positively related to the number of cognitive turning points (i.e., ratings of 2 in the area of cognition:  $r = .33$ ,  $p < .04$ ). The total number of continuous change ratings (i.e., ratings of 1 across all three areas) was negatively

related to the degree of religious commitment ( $\underline{r} = .31$ ,  $\underline{p} < .05$ ) The extent of change in goal-orientation was found to be positively related to the degree of exploration in the area of sex-roles ( $\underline{r} = .36$ ,  $\underline{p} < .03$ ). Finally, the number of 'no change' ratings in the area of goal-orientation was found to be negatively correlated with the extent of exploration in the area of sex-roles ( $\underline{r} = -.32$ ,  $\underline{p} < .05$ ). Although the number of significant findings is relatively small compared to the number of correlations performed, all of the significant results are in the predicted direction.

The subjective ratings derived from the Episode Summary Forms were also assessed with regard to their relationship with the identity status variables. Pearson product-moment correlations were performed using the sums of subjects' ratings for each of the four questions (i.e., accuracy of account, importance of the event, amount of change resulting from the event, and the event's length of impact), and relating them to the degree of exploration and commitment in each of the four areas of the Identity Status Interview (i.e., occupation, religion, friendship, and sex-roles). Although the correlations involving subjects' ratings of accuracy, importance, and change did not reveal any significant results, an interesting trend appeared in the relationship between exploration and subjective estimates of the length of impact of nuclear episodes. There were significant positive relationships between the total ratings of length of impact and occupational exploration ( $\underline{r} = .47$ ,  $\underline{p} < .003$ ), friendship exploration ( $\underline{r} = .43$ ,  $\underline{p} < .006$ ), and sex-role exploration ( $\underline{r} = .32$ ,  $\underline{p} < .05$ ).

A series of t-tests was performed, using identity status in each area as the independent variable (i.e., diffusion and foreclosure vs. moratorium and achievement) and the subjective ratings derived from the Episode Summary Forms as the dependent variables. These analyses revealed significant relationships between identity status and subjects' ratings of the length of impact of their significant life events. Subjects reported the impact of their nuclear episodes as having lasted longer if they were in the higher identity statuses (i.e., moratorium or identity achievement) in the areas of occupation ( $t(38) = -2.45$ ,  $p < .02$ ), friendship ( $t(38) = -4.20$ ,  $p < .001$ ), and sex-roles ( $t(38) = -2.17$ ,  $p < .04$ ). Similar t-tests were also performed using identity status in each area as the independent variable and the various ratings from the Nuclear Episode Interview as the dependent variables. Although very few of these analyses yielded significant findings, there was a tendency for subjects who were high in identity status in the area of religion to have a greater number of goal-oriented turning points (i.e., ratings of 2 in the area of goals) than subjects in the lower identity statuses in this area ( $t(38) = -1.72$ ,  $p < .10$ ). In addition, subjects who were high in identity status in the area of sex-roles tended to receive a smaller number of 'no change' ratings (0's) over the three areas of behavior, cognition, and goals than did subjects who were in the lower identity statuses in this area ( $t(38) = 1.69$ ,  $p < .10$ ). In these analyses, as in the previous ones comparing subjects who are high and low in identity status, the results must be considered carefully, as the groups of high identity status subjects are considerably larger than



those of low identity subjects. The results of these F-tests are shown in Table 3.9.

### Ego Development and Nuclear Episodes

The final set of analyses performed was based on the relationship between ego development and the data derived from the Nuclear Episode Interview. It was hypothesized that subjects at higher ego stages would exhibit a greater number of turning point nuclear episodes in their life stories than subjects at lower levels of ego development. To test this hypothesis, a series of F-tests was performed using the three levels of ego development (i.e., low, medium, and high) as the independent variable and the various scores for the extent and types of changes derived from the Nuclear Episode Interview as the dependent variables. Contrary to expectation, ego development was not found to be related to the number of turning points in subjects' life stories ( $F(2,37) < 1$ , ns). In fact, none of the analyses involving ego stage and the nuclear episode data yielded significant findings. F-tests were also performed using ego level as the independent variable and subjects' ratings of accuracy, importance, change, and length of impact from the Episode Summary Forms as the dependent variables. The only analysis to yield significant findings involved the relationship between ego development and subjective ratings of the length of impact of nuclear episodes ( $F(2,37) = 3.56$ ,  $p < .04$ ). Subsequent contrasts using Duncan's multiple range procedure revealed that subjects at the highest levels of ego development (I-4/5 and I-5) rated their nuclear episodes as having had a longer-lasting impact than did subjects at the lowest (I-3 and I-3/4) levels of

Table 3.9

Mean Subjective Length of Impact Ratings Classified by IdentityStatus in Four Areas

	<u>Occupational Identity Status</u>		<u>F</u>
	Low	High	
Subjective ratings for length of impact	38.00 (N=6)	43.77 (N=34)	6.01*
<hr/>			
	<u>Religious Identity Status</u>		<u>F</u>
	Low	High	
Subjective ratings for length of impact	40.40 (N=10)	43.73 (N=30)	0.12
<hr/>			
	<u>Friendship Identity Status</u>		<u>F</u>
	Low	High	
Subjective ratings for length of impact	34.60 (N=5)	44.09 (N=35)	17.64***
<hr/>			
	<u>Sex-Role Identity Status</u>		<u>F</u>
	Low	High	
Subjective ratings for length of impact	39.70 (N=10)	43.97 (N=30)	4.70*

\*\*\* $p < .001$ \* $p < .05$

ego development ( $\underline{p} < .05$ ). Aside from this last finding, however, the dearth of significant results in this set of analyses would seem to imply that ego development, at least for those individuals participating in the present investigation, is unrelated to the extent and types of changes in subjects' life stories.

## CHAPTER IV

### DISCUSSION

The purpose of the present investigation was to examine the relationships among identity status, ego stage, and the extent and types of changes in the life stories of young adult women. This research sought to test the proposition that there would be positive relationships among the three main variables of interest, such that subjects who were in the higher identity statuses (i.e., achievement and moratorium) would be at higher ego stages (i.e., post-conformist conscientious (I-4/5) and autonomous (I-5)) and would also show a greater number of "turning point" nuclear episodes in their life stories. Although the results of this study failed to demonstrate these relationships conclusively, the findings are interesting and provocative with regard to the hypotheses specified above. In addition, this research raises a variety of methodological issues relevant to personological investigations of this type.

Previous research on ego identity has shown that the greatest amount of progress in identity formation occurs during the college years (e.g., Adams & Fitch, 1982; Waterman, Geary, & Waterman, 1974). It has been suggested, however, that female identity development proceeds at a somewhat slower pace than male identity development (e.g., Erikson, 1968; Marcia, 1980). According to Erikson (1968), males need to develop a firm sense of personal identity before they are able to form intimate

relationships with others, and thus, the psychosocial stages of identity and intimacy are thought to be distinct from one another in male development. In contrast, a traditional view of psychosocial development in females holds that women derive their identities, at least in part, from their intimate relationships with others. Consequently, the stages of identity and intimacy are thought to be temporally merged with respect to female development.

In order to ensure that the sample used in the present investigation would contain an adequate number of high identity women (i.e., identity achievers and moratoriums), only women who were at least 20 years of age were selected for participation. The result of this recruitment procedure was an unexpected overabundance of high identity subjects and a comparatively small percentage of low identity subjects. Consequently, the various statistical tests used to compare high- and low-identity individuals were not as powerful as they might have been, had the sample consisted of a more even distribution of subjects in each of the four identity statuses. A similar problem emerged with regard to ego development, such that a large proportion of the sample was found to be at the higher, post-conformist levels of ego development, while very few subjects were at the lower, conformist stages of ego development.

It is possible that the nature of the present investigation and the manner in which it was presented to prospective subjects may have resulted in a selection bias, whereby more mature and psychologically-minded individuals were self-selected for participation. Since the decision to participate was strictly voluntary, even for those individu-

als receiving course credit as an inducement, it is likely that most of the individuals who chose to participate in this study felt that they had a reasonably good understanding of themselves and their lives, and felt comfortable in presenting this information for scientific inquiry. The fact that 18 (45%) of the 40 subjects were majoring in psychology would seem to suggest, at the very least, that many of the subjects are accustomed to looking at the world, and perhaps themselves, in psychological terms. Moreover, potential subjects were told that they would be asked to discuss several significant life events and the meaning that they have had for them in the format of a somewhat lengthy interview, and it is highly probable that this recruitment procedure resulted in a sample of women who were familiar and comfortable with introspection and capable of articulating the insights derived from such self-reflective activity.

In keeping with the results from previous research showing that individuals tend to move out of the lower identity statuses of diffusion and foreclosure and into the higher identity statuses of moratorium and achievement with increasing age, the present investigation revealed significant relationships between age and exploration in each of the four areas assessed by the Identity Status Interview. Significant relationships were also observed between subjects' year in college and their degree of exploration in the areas of occupation, friendship, and sex-roles. Neither age nor college class was found to be related to the degree of commitment in any of the four areas. These findings would appear to support Munro and Adams' (1977) conceptualization of the col-

lege years as a period of "psychosocial moratorium," wherein students are afforded the luxury of exposure to a variety of options from which to choose, but are not required to make firm commitments until they are about to enter the working world.

Consistent with this notion was the finding that subjects who were in the identity achievement and moratorium statuses in the areas of occupation and sex-roles were more advanced in their college careers. These findings make sense in light of the fact that career issues tend to become paramount as one approaches graduation. Similarly, the feminist movement of the 1970's has made sex-role issues particularly salient, especially for women, and it could be argued that female undergraduates become increasingly aware of their options to pursue either a traditional (i.e., marriage and family) or a non-traditional (i.e., career) lifestyle as college graduation approaches. Thus, attitudes with regard to occupation and sex-roles would seem to be intertwined for women and directly related to educational level and one's proximity to graduation, whereas views about religion and friendship do not necessarily have to be translated into lifestyle decisions when one is about to enter the working world.

As with identity development, previous research has demonstrated that individuals move from the lower ego stages into higher levels of ego development during the course of adolescence and young adulthood (e.g., Redmore & Loevinger, 1979). In the present investigation, however, there was no apparent relationship between age and ego development. Ego stage was found to be related to subjects' level of educa-

tion, and women who were at post-conformist levels of ego development (I-4 or higher) were found to have completed more years of college than those subjects who were rated at the conformist stages of ego development (I-3 and I-3/4). In a recent longitudinal study of ego development among students at a liberal arts college and a technological institute, Loevinger, Cohn, Bonneville, Redmore, Streich, and Sargent (1985) observed slight increases in ego stage over time for all subjects, with the exception of female students at the liberal arts college who showed a slight but consistent regression in ego development over the course of their college careers. This finding is particularly interesting, since it contradicts most of the previous research on ego development as well as the findings from the present investigation with regard to the relationship between ego stage and educational level.

In studying the relationship between identity status and ego development, it was expected that the present investigation would reveal results consistent with those found in previous research of this nature. More specifically, Ginsburg and Orlofsky (1981) found that college women in the identity achievement and moratorium statuses were significantly higher in ego development than women in the foreclosure and identity diffusion statuses. This relationship was also observed in the present study, but only with regard to identity status in the area of sex-roles. Subjects who were rated as identity achievement or moratorium in the area of sex-roles were more likely to be at post-conformist ego stages, in contrast to foreclosure and diffusion subjects in the area of sex-roles, who were more likely to be at lower, conformist levels of ego



development. Similarly, the extent of subjects' exploration in the areas of occupation and sex-roles was found to be positively related to ego stage. Since previous research (e.g., Schenkel & Marcia, 1972) has shown the identity status areas of religion and sex-roles to yield greater differentiation among female subjects on various dependent measures, the finding that ego development was related to sex-role identity status is encouraging.

The Nuclear Episode Interview was devised for use in the present investigation in order to study how specific types of life experiences were related to the more global developmental measures of ego stage and identity status. An initial review of the data derived from this instrument revealed that the extent of cognitive change in subjects' nuclear episodes was greater than the extent of behavioral change, which was in turn greater than the extent of change in goal-orientation. It seems likely, however, that this finding represents an artifact of the interview format, rather than reflecting true differences in the types of changes reported. Since subjects were asked to discuss why the episodes they described were meaningful to them, it was not particularly surprising to observe a tendency among subjects to provide cognitive explanations and interpretations of their significant life events.

It was hypothesized that subjects in the higher identity statuses of moratorium and achievement would have experienced more turning point nuclear episodes than subjects in the lower identity statuses of foreclosure and diffusion. This hypothesis was based on the idea that turning points reflect actual instances of exploration and capture the sub-

ject's transition from one option to its opposite (e.g., "I used to be a devout fundamentalist Christian, but ever since (the episode) I've become an atheist"). Although this hypothesis was not confirmed in the present investigation, several interesting findings did emerge from this set of analyses. For example, the degree of sex-role exploration was found to be positively related to the extent of change in the area of goal-orientation. Similarly, the degree of sex-role exploration was found to be negatively related to the number of 'no change' ratings (0's) in the area of goal-orientation. In addition, subjects rated as moratorium or achievement in the area of religion received more turning point ratings (2's) in the area of goal-orientation than did subjects rated as foreclosed or identity-diffuse in this area. Finally, subjects who were rated as moratorium or achievement in the area of sex-roles received fewer 'no change' ratings (0's) across the three areas of behavior, cognition, and goals than did subjects who were rated as foreclosed or identity-diffuse in this area. Although these findings are far from conclusive, they do provide partial support for the major hypothesis and are, in some cases (e.g., the negative relationship between 0 ratings and identity status in the area of sex-roles), complementary.

One of the obvious problems in relating the identity status variables to the data derived from the Nuclear Episode Interview involves the fact that the identity status data are content-specific (i.e., occupation, religion, friendship, and sex-roles), while the Nuclear Episode data are generic as derived from its present coding system. Recent

revisions of the Identity Status Interview and its coding system (e.g., Grotevant, Thorbecke, & Meyer, 1982; Matteson, 1977) have come about because of the finding that identity development proceeds at different rates in different content areas. That is, an individual could be identity-achieved in the area of occupation, while being foreclosed in the area of religion. Thus, Marcia's (1966; 1967) original method of rating subjects' overall identity status by collapsing ratings across all areas of the interview has become relatively rare, and more recent investigations have looked at the identity status ratings from each area of the interview separately.

Given that identity formation is content-specific, then the hypothesis that the number of turning points in a subject's life story is related to the degree of identity exploration (in any area) is far too general to yield reliable results. For example, an individual who has had a turning point episode involving religion (e.g., "I used to be an Episcopalian and as a result of (the episode) I've become a Hare Krishna") has clearly engaged in identity exploration in the area of religion. However, it would be stretching matters to state conclusively that this episode has had ramifications for the individual's identity development in the other areas tapped by the Identity Status Interview. Unfortunately, the data derived from the Nuclear Episode Interview were not coded according to content in the present investigation, and thus, it is impossible to determine the relationship between turning points in specific areas of subjects' lives and identity status in the four content areas assessed by the Identity Status Interview. This problem

could be circumvented in future research of this type either by coding the data from the Nuclear Episode Interview for content (using categories similar to those used in the Identity Status Interview), or by changing the instructions to the Nuclear Episode Interview and asking subjects to describe significant life events related to a specific type of content (e.g., discuss a significant event in your life involving religion, sex-roles, etc.).

The Episode Summary Forms were used in an attempt to determine whether subjects' ratings of the importance and amount of change resulting from their nuclear episodes would be related to the ratings derived from the Nuclear Episode Interview. It had been assumed that subjects who had had more turning point nuclear episodes would tend to rate their episodes as having been more important and resulting in more change in their lives than subjects with fewer turning points in their life stories. On the average, subjects gave very high ratings on all of the questions of the Episode Summary Form, indicating that they viewed their experiences as having been very important and resulting in a considerable amount of change in their lives. It is quite possible that subjects' ratings were influenced by the the instructions to the Nuclear Episode Interview and their desire to respond in a socially appropriate manner. That is, having been asked to discuss "significant life events," subjects probably felt that their ratings should reflect the fact that the episodes they chose to describe were important in the course of their lives. Thus, reporting that the significant events discussed were indeed significant could be viewed as tantamount to subjects

having reported that they were complying with the instructions to the task. Given this interpretation, it seems unlikely that subjects' ratings on the Episode Summary Forms are completely accurate indicators of the actual importance and change resulting from their nuclear episodes.

There was very little agreement between the ratings derived from the Nuclear Episode Interview and subjects' ratings on the Episode Summary Forms. As was mentioned in Chapter 3, it appears that these two instruments are measuring two different things. The Nuclear Episode Interview is coded for specific types of changes (i.e., turning points and continuous changes), while the Episode Summary Forms ask for a more global estimate of how much a given event has changed the subject's life. In spite of the apparent difference between these two measures of change, relationships were found between the ratings derived from the Nuclear Episode Interview and those from the Episode Summary Forms. There was a negative relationship between the number of continuous ratings (1's) in the area of behavior and subjects' ratings of the importance of their episodes. Similarly, a negative relationship was observed between the number of continuous ratings in the area of cognition and subjects' ratings of the extent of change resulting from their nuclear episodes. Thus, it would appear that episodes of continuity are not perceived by subjects as being as important or resulting in as much change as other types of episodes. Although these findings seem to provide partial support for the hypothesis that the ratings derived from the Nuclear Episode Interview would be related to subjects' ratings on the Episode Summary Forms, the lack of a positive relationship between

turning point ratings and subjects' estimates of importance and change implies that these two instruments may not be comparable.

Identity status and the degree of exploration in each of the three areas of occupation, friendship, and sex-roles was found to be related to subjects' ratings of the length of impact of their nuclear episodes on the Episode Summary Forms. Subjects who were rated as moratorium or identity achievement in the areas of occupation, friendship, and sex-roles rated their episodes as having had a longer-lasting average impact than those subjects who were rated as foreclosure or identity diffusion in these three areas. Similarly, the degree of identity exploration in the areas of occupation, friendship, and sex-roles was found to be positively related to subjects' ratings of the length of impact of their nuclear episodes. Length of impact may be another way of assessing the importance of a particular episode, if it is assumed that those episodes which are most important are those which have the longest-lasting impact on subjects' lives. Whatever the case, there was more variation among the the responses to this question on the Episode Summary Form, as compared to the responses to the questions concerning accuracy, importance, and change, and it would appear that subjects' ratings of the length of impact of their nuclear episodes were not as strongly influenced by the demand characteristics of the experimental procedure as were their ratings on the other questions of the Episode Summary Form.

The relationship between ego development and the data derived from the Nuclear Episode Interview was also assessed in the present investigation. McAdams (1985) found that subjects at higher levels of ego

development had more turning points in their life stories than subjects at lower ego stages, and it was hypothesized that McAdams' findings would be replicated in the present study. Unfortunately, this hypothesis was not confirmed, and no significant relationships emerged between ego stage and the number of turning points in subjects' life stories. This finding might be due to the fact that McAdams (1985) used a different interview and coding system for assessing turning points than that used in the present investigation. In addition, the sample used in McAdams' (1985) study was composed of midlife men and women, while the present sample was made up of college-age women. It is also important to recall Loevinger et al.'s (1985) finding that women at a liberal arts college tended to regress in ego development during their college years. Although this would not appear to be the case in the present sample, since ego stage was found to be positively related to educational level, the fact that ego development may not follow a steady progressive developmental sequence in undergraduate women would seem to cast doubt on the possibility of observing clear relationships between ego stage and variables thought to reflect increasing psychological maturity in samples of college women.

Interestingly enough, ego stage was found to be positively related to subjects' ratings of the length of impact of their nuclear episodes on the Episode Summary Forms, such that subjects who were rated at the post-conformist levels of ego development (I-4/5 and I-5) reported that their nuclear episodes had a longer average length of impact than subjects who were at the lower, conformist ego stages (I-3 and I-3/4). It

is possible that the length of impact ratings reflect subjects' ability to learn from their experiences, whereby those subjects who incorporate their past experience into present action may grow more as a result, while those who ignore or forget their past experience more easily may not derive as much benefit from it. Since it is difficult to determine how subjects interpreted the questions on the Episode Summary Forms and it seems likely that subjects' responses were confounded by extraneous factors (e.g., social desirability), all conclusions with respect to this instrument are necessarily speculative.

Although it had been hoped that the present investigation would shed light on the process of psychological development in young adult women, various methodological flaws seem to have limited this possibility. First of all, the sample showed highly skewed distributions on the measures of identity status and ego development. Since almost all of the subjects were high on these two variables, it was virtually impossible to study the differences between high- and low-scoring subjects on two of the three main variables of interest in this investigation. In addition, coding of the Nuclear Episode data did not address the content of subjects' life experiences. Consequently, relationships between the data derived from this instrument and the content-specific variables from the Identity Status Interview did not emerge as being particularly meaningful or enlightening.

Perhaps the most frustrating aspect of the present study was the necessity of applying nomothetic standards to inherently idiographic data. Although subjects provided a substantial amount of rich informa-



tion with regard to their life experiences, only a small portion of this data was ultimately used in the statistical analyses. Thus, the uniqueness of the individual was essentially sacrificed for the sake of group trends, and this approach would appear to be almost antithetical to the personological tradition, which emphasizes the qualitative study of the whole person. This type of research could be greatly improved by returning to the single-case designs exemplified in the work of Erik Erikson (e.g., 1958, 1969), and performing extensive qualitative analyses of individual life stories. To assess differences among individuals with regard to life experiences, it would be necessary to develop a system for qualitatively evaluating the content of subjects' life stories, such that the uniqueness of the individual would not be lost. Josselson (1973) provides an excellent example of of this type of research strategy in her study of both the intra- and interindividual factors influencing identity formation in college women.

As of yet, relatively little is known about the process of female identity development. Given the changing role of women in today's society, there are a variety of factors that need to be considered in addressing this issue. For example, Erikson's (1968) hypothesis that identity development in women is based on the ability to form intimate relationships with others may indeed hold true for more traditional women. However, the preponderance of non-traditional women in our society suggests that there may be alternative pathways leading to identity formation in women, in addition to the one proposed by Erikson. Despite the dearth of significant findings in the present investigation, the

life story approach to the study of identity development should not be discounted. If future research on this topic is conducted with an awareness of the pitfalls of this investigation and a closer adherence to the personological tradition, it is likely that great strides will be made in our understanding of the relationship between life experiences and subsequent identity and ego development.

## REFERENCES

- Adams, G. R., & Fitch, S. A. (1982). Ego stage and identity status development: A cross-sequential analysis. Journal of Personality and Social Psychology, 43, 574-583.
- Adams, G. R., & Shea, J. A. (1979). The relationship between identity status, locus of control, and ego development. Journal of Youth and Adolescence, 8, 81-89.
- Ansbacher, H. L. (1947). Adler's place today in the psychology of memory. Individual Psychology Bulletin, 6, 32-40.
- Asch, S. E. (1956). Studies of independence and conformity: I. A minority of one against a unanimous majority. Psychological Monographs, 70 (9, Whole No. 416).
- Block, J. (1961). Ego identity, role variability and adjustment. Journal of Consulting Psychology, 25, 392-397.
- Bourne, E. (1978a). The state of research on ego identity: A review and appraisal. Part I. Journal of Youth and Adolescence, 7, 223-251.
- Bourne, E. (1978b). The state of research on ego identity: A review and appraisal. Part II. Journal of Youth and Adolescence, 7, 371-392.
- Candee, D. (1974). Ego developmental aspects of the new left ideology. Journal of Personality and Social Psychology, 30, 620-630.
- Carlson, L., & Carlson, R. (1984). Affect and psychological magnification: Derivations from Tomkins' script theory. Journal of

- Carlson, R. (1981). Studies in script theory: I. Adult analogs of a childhood nuclear scene. Journal of Personality and Social Psychology, 40, 501-510.
- Carroll, Lewis (1978). Alice's adventures in Wonderland. New York: Schocken Books.
- Cohler, B. J. (1982). Personal narrative and life course. In P. B. Baltes & O. G. Brim (Eds.), Life-span development and behavior (Vol. 4). New York: Academic Press. 205-241.
- Constantinople, A. (1969). An Eriksonian measure of personality development in college students. Developmental Psychology, 1, 357-372.
- Cross, H., & Allen, J. (1970). Ego identity status, adjustment and academic achievement. Journal of Consulting and Clinical Psychology, 34, 288.
- Damon, W. (1983a). Social and personality development: Infancy through adolescence. New York: W. W. Norton.
- Damon, W. (Ed.) (1983b). Social and personality development: Essays on the growth of the child. New York: W. W. Norton.
- Dignan, M. H. (1965). Ego identity and maternal identification. Journal of Personality and Social Psychology, 1, 476-483.
- Douvan, E., & Adelson, J. (1966). The adolescent experience. New York: Wiley.
- Erikson, E. H. (1958). Young man Luther: A study in psychoanalysis and history. New York: W. W. Norton.
- Erikson, E. H. (1959). Identity and the life cycle: Selected papers. Psychological Issues, 1(1), 5-165.

- Erikson, E. H. (1963). Childhood and society (2nd ed.). New York: W. W. Norton.
- Erikson, E. H. (1968). Identity: Youth and crisis. New York: W. W. Norton.
- Erikson, E. H. (1969). Gandhi's truth: On the origins of militant nonviolence. New York: W. W. Norton.
- Fitzgerald, J. M. (1980). Sampling autobiographical memory reports in adolescents. Developmental Psychology, 16, 675-676.
- Freud, S. (1910). Leonardo da Vinci and a memory of his childhood. Standard Edition, 11, 59-137.
- Ginsburg, S. D., & Orlofsky, J. L. (1981). Ego identity status, ego development, and locus of control in college women. Journal of Youth and Adolescence, 10, 297-306.
- Grossman, S. M., Shea, J. A., & Adams, G. R. (1980). Effects of parental divorce during early childhood on ego development and identity formation of college students. Journal of Divorce, 3, 263-272.
- Grotevant, H. D., & Cooper, C. R. (1981). Assessing adolescent identity in the areas of occupation, religion, politics, friendships, dating, and sex roles: Manual for administering and coding of the interview. JSAS Catalog of Selected Documents in Psychology, 11, (3).
- Grotevant, H. D., Thorbecke, W., & Meyer, M. L. (1982). An extension of Marcia's identity status interview into the interpersonal realm. Journal of Youth and Adolescence, 11, 33-47.

- Gruen, W. (1960). Rejection of false information about oneself as an indication of ego identity. Journal of Consulting Psychology, 24, 231-233.
- Hankiss, A. (1981). Ontologies of the self: On the mythological rearranging of one's life history. In D. Bertaux (Ed.), Biography and society: The life history approach in the social sciences. Beverly Hills, CA.: Sage Publications.
- Hauser, S. T. (1976). Loevinger's model and measure of ego development: A critical review. Psychological Bulletin, 80, 928-955.
- Heilbrun, A. B. (1964). Conformity to masculinity-femininity stereotypes and ego identity in adolescents. Psychological Reports, 14, 351-357.
- Hodgson, J. W., & Fischer, J. L. (1979). Sex differences in identity and intimacy development in college youth. Journal of Youth and Adolescence, 8, 37-50.
- Holt, R. R. (1980). Loevinger's measure of ego development: Reliability and national norms for male and female short forms. Journal of Personality and Social Psychology, 39, 909-920.
- Hopkins, J. R. (1983). Adolescence: The transitional years. New York: Academic Press.
- Horner, M. (1968). Sex differences in achievement motivation and performance in competitive and noncompetitive situations. Unpublished doctoral dissertation, University of Michigan.
- Josselson, R. L. (1973). Psychodynamic aspects of identity formation in college women. Journal of Youth and Adolescence, 2, 3-52.

- Josselson, R. (1982). Personality structure and identity status in women as viewed through early memories. Journal of Youth and Adolescence, 11, 293-299.
- Josselson, R., Greenberger, E., & McConochie, D. (1977). Phenomenological aspects of psychosocial maturity in adolescence. Part II. Girls. Journal of Youth and Adolescence, 6, 145-167.
- Kagan, J., Rosman, B. L., Day, D., Albert, J., & Phillips, W. (1964). Information processing in the child: Significance of analytic and reflective attitudes. Psychological Monographs, 78 (Whole No. 578).
- Kohlberg, L. (1964). Development of moral character and moral ideology. In M. L. Hoffman & L. W. Hoffman (Eds.), Review of child development research, Vol. 1, New York: Russell Sage Foundation.
- Kotre, J. (1984). Outliving the self: Generativity and the interpretation of lives. Baltimore: Johns Hopkins University Press.
- Loevinger, J. (1966). The meaning and measurement of ego development. American Psychologist, 21, 195-206.
- Loevinger, J. (1973). Ego development: Syllabus for a course. In B. Rubenstein (Ed.), Psychoanalysis and contemporary science (Vol. 2). New York: Macmillan.
- Loevinger, J. (1976). Ego development: Conceptions and theories. San Francisco: Jossey-Bass.
- Loevinger, J., Cohn, L. D., Bonneville, L. P., Redmore, C. D., Streich, D. D., & Sargent, M. (1985). Ego development in college. Journal of Personality and Social Psychology, 48, 947-962.

- Loevinger, J., & Wessler, R. (1970). Measuring ego development 1. Construction and use of a sentence completion test. San Francisco: Jossey-Bass.
- Loevinger, J., & Wessler, R. (1978). Measuring ego development 1. Construction and use of a sentence completion test (2nd ed.). San Francisco: Jossey-Bass.
- Loevinger, J., Wessler, R., & Redmore, C. (1970). Measuring ego development 2. Scoring manual for women and girls. San Francisco: Jossey-Bass.
- Loevinger, J., Wessler, R., & Redmore, C. (1978). Measuring ego development 2. Scoring manual for women and girls. (2nd ed.). San Francisco: Jossey-Bass.
- Marcia, J. E. (1966). Development and validation of ego identity status. Journal of Personality and Social Psychology, 3, 551-558.
- Marcia, J. E. (1967). Ego identity status: Relationships to change in self-esteem, "general maladjustment," and authoritarianism. Journal of Personality, 35, 119-133.
- Marcia, J. E. (1980). Identity in adolescence. In J. Adelson (Ed.), Handbook of adolescent psychology. New York: Wiley. 159-187.
- Marcia, J. E., & Friedman, M. L. (1970). Ego identity status in college women. Journal of Personality, 38, 149-263.
- Matteson, D. R. (1977). Exploration and commitment: Sex differences and methodological problems in the use of identity status categories. Journal of Youth and Adolescence, 6, 353-374.



- Mayman, M. (1968). Early memories and character structure. Journal of Projective Techniques in Personality Assessment, 32, 303-316.
- McAdams, D. P. (1985). Power, intimacy, and the life story. Homewood, IL.: Dorsey Press.
- McClelland, D. C., Atkinson, J. W., Clark, R. A., & Lowell, E. L. (1953). The achievement motive. New York: Appleton-Century-Crofts.
- Munro, G., & Adams, G. R. (1977). Ego-identity formation in college students and working youth. Developmental Psychology, 13, 523-524.
- Murray, H. A. (1938). Explorations in personality. New York: Oxford University Press.
- Murray, H. A. (1955). American Icarus. In A. Burton & R. E. Harris (Eds.), Clinical studies in personality. New York: Harper & Row.
- O'Connell, A. N. (1976). The relationship between life style and identity synthesis and resynthesis in traditional, neotraditional, and nontraditional women. Journal of Personality, 44, 675-688.
- Olney, J. (1972). Metaphors of self: The meaning of autobiography. Princeton, N. J.: Princeton University Press.
- Orlofsky, J. L. (1978). Identity formation, Achievement, and fear of success in college men and women. Journal of Youth and Adolescence, 7, 49-62.
- Orlofsky, J. L., Marcia, J. E., & Lesser, I. M. (1973). Ego identity status and the intimacy versus isolation crisis of young adulthood. Journal of Personality and Social Psychology, 27,

211-219.

- Oshman, H., & Manosevitz, M. (1974). The impact of the identity crisis on the adjustment of late adolescent males. Journal of Youth and Adolescence, 3, 207-216.
- Podd, M. H. (1972). Ego identity status and morality: The relationship between the two constructs. Developmental Psychology, 6, 497-507.
- Rasmussen, J. E. (1964). The relationship of ego identity to psychosocial effectiveness. Psychological Reports, 15, 815-825.
- Redmore, C. D., & Loevinger, J. (1979). Ego development in adolescence: Longitudinal studies. Journal of Youth and Adolescence, 8, 1-20.
- Rogow, A. M., Marcia, J. E., & Slugoski, B. R. (1983). The relative importance of identity status interview components. Journal of Youth and Adolescence, 12, 387-399.
- Rothman, K. R. (1978). Multivariate analysis of the relationship of psychosocial crisis variables to ego identity status. Journal of Youth and Adolescence, 7, 93-105.
- Rotter, J. B. (1966). Generalized expectancies for internal vs. external control of reinforcement. Psychological Monographs, 80 (1): Whole No. 609.
- Santrock, J. W. (1984). Adolescence (2nd ed.). Dubuque, Iowa: Wm. C. Brown.
- Schenkel, S. (1975). Relationship among ego identity status, field-independence, and traditional femininity. Journal of Youth and Adolescence, 4, 73-82.

- Schenkel, S., & Marcia, J. E. (1972). Attitudes toward premarital intercourse in determining ego identity status in college women. Journal of Personality, 3, 472-482.
- Schiedel, D. G., & Marcia, J. E. (1985). Ego identity, intimacy, sex role orientation, and gender. Developmental Psychology, 21, 149-160.
- Stark, P. A., & Traxler, A. J. (1974). Empirical validation of Erikson's theory of identity crises in late adolescence. Journal of Psychology, 86, 25-33.
- St. Clair, S., & Day, H. D. (1979). Ego identity status and values among high school females. Journal of Youth and Adolescence, 8, 317-326.
- Tesch, S. A., & Whitbourne, S. K. (1982). Intimacy and identity status in young adults. Journal of Personality and Social Psychology, 43, 1041-1051.
- Toder, N. L., & Marcia, J. E. (1973). Ego identity status and response to conformity pressure in college women. Journal of Personality and Social Psychology, 26, 287-294.
- Tomkins, S. S. (1978). Script theory: Differential magnification of affects. In H. E. Howe, Jr. & R. A. Dienstbier (Eds.), Nebraska Symposium on Motivation, Vol. 26. Lincoln: University of Nebraska Press.
- Waterman, A. S. (1982). Identity development from adolescence to adulthood: An extension of theory and a review of research. Developmental Psychology, 18, 341-358.

- Waterman, A. S., Geary, P. S., & Waterman C. K. (1974). Longitudinal study of changes in ego identity status from the freshman to the senior year at college. Developmental Psychology, 10, 387-392.
- Waterman, A. S., Kohutis, E., & Pulone, J. (1977). The role of expressive writing in ego identity formation. Developmental Psychology, 13, 286-287.
- Waterman, A. S., & Waterman, C. K. (1970). The relationship between ego identity status and satisfaction with college. Journal of Educational Research, 64, 165-168.
- Waterman, A. S., & Waterman, C. K. (1971). A longitudinal study of changes in ego identity status during the freshman year at college. Developmental Psychology, 5, 167-173.
- Waterman, C. K., Beubel, M., & Waterman, A. S. (1970). Relationship between resolution of the identity crisis and outcomes of previous psychosocial crises. Proceedings of the 78th Annual Convention of the American Psychological Association, 467-468.
- Waterman, C. K., & Nevid, J. S. (1977). Sex differences in the resolution of the identity crisis. Journal of Youth and Adolescence, 6, 342.
- Waterman, C. K., & Waterman, A. S. (1974). Ego identity status and decision styles. Journal of Youth and Adolescence, 3, 1-6.
- Watson, R. I. (1967). Psychology: A prescriptive science. American Psychologist, 22, 435-443.
- Whitbourne, S. K., Jelsma, B. M., & Waterman, A. S. (1982). An Eriksonian measure of personality development in college students:

A reexamination of Constantinople's data and a partial replication. Developmental Psychology, 18, 369-371.

Whitbourne, S. K., & Waterman, A. S. (1979). Psychosocial development during the adult years: Age and cohort comparisons. Developmental Psychology, 15, 373-378.

Witkin, H. A., Dyk, R. B., Faterson, H. F., Goodenough, D. R., & Karp, S. A. (1962). Psychological differentiation. New York: Wiley.

Witkin, H. A., Oltman, P. K., Raskin, E., & Karp, S. A. (1971). A manual for the Embedded Figures Tests. Palo Alto, CA.: Consulting Psychologists Press.

## APPENDIX

Psychology 101 Folder

ATTENTION: WOMEN WHO ARE 20 OR OLDER.....

Name of Experiment: RAP

# of Credits Possible: 2-3

Place of Experiment: Damen Hall 1047

Description: This study involves one session (lasting approximately 2 hours), which is divided into 3 parts:

- 1) an interview where you are asked to discuss some of the significant events in your life and the meaning that they have had for you.
- 2) a brief questionnaire.
- 3) an interview in which you are asked to briefly describe your career goals and attitudes about such issues as religion, friendship, and men's and women's roles.

You will be interviewed by a graduate student in clinical psychology. All sessions are run on an individual basis. Confidentiality and anonymity are GUARANTEED, as your name will not be recorded on any of the experimental data. Your participation is greatly appreciated!!!

TO SIGN UP: Just leave your name and phone number and the experimenter will contact you to arrange a convenient time for your participation. Thanks again.

*Carol Kirshnit*  
Carol Kirshnit

INFORMED CONSENT

Thank you for volunteering to be a participant in this research project. The procedure, which involves two interviews and a short sentence completion form, should last approximately 1½ to 2 hours. Although you are encouraged to be as open as possible, should you choose not to answer any question during this time, your decision will be respected. If at any point in the procedure you decide that you no longer want to participate, you are free to do so and will not be penalized in any way.

I would like to audiotape the interview portion of the procedure with your permission. I will be the only person who listens to this tape and it will be kept in a locked file cabinet until the conclusion of this study, at which point the tape will be destroyed. All data to be collected will be coded numerically, and this is the only form on which your name will be recorded. Before you leave today I will be happy to explain the nature of the research that I am doing and what I hope to accomplish through this procedure. However, I will be unable to provide you with any individualized feedback. Your participation is greatly appreciated. Thanks again!!

Sincerely,

*Carol Kirshnit*

Carol E. Kirshnit

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I understand the procedure involved in this study and my rights as specified above. I agree to allow my interviews to be audiotaped. If at any point I decide that I would like to discontinue my participation or stop taping, I know that I am free to do so and will not be penalized in any way.

Date \_\_\_\_\_



Demographic Information

122

Subject #: \_\_\_\_\_

Date of Birth: \_\_\_\_\_

Religious Affiliation: Catholic \_\_\_\_\_ Protestant \_\_\_\_\_  
Jewish \_\_\_\_\_ Other (please specify) \_\_\_\_\_ None \_\_\_\_\_

Marital Status: Single \_\_\_\_\_ Married \_\_\_\_\_ Separated \_\_\_\_\_  
Divorced \_\_\_\_\_ Other (please specify) \_\_\_\_\_

Class: Freshman \_\_\_\_\_ Sophomore \_\_\_\_\_ Junior \_\_\_\_\_  
Senior \_\_\_\_\_ Other (please specify) \_\_\_\_\_

Major: \_\_\_\_\_

Post-graduate plans: \_\_\_\_\_

We would like you to imagine for a moment that you are sitting down to write your life story. Since it would most likely be a monumental task to recount each and every event that has transpired in your life thus far, you will need to concentrate on only those experiences that stand out in your memory as having been especially meaningful or significant in shaping the course of your life. An event of this sort might include a major personal accomplishment or failure, a significant interaction with another person, or any episode in which you came to some type of realization or understanding of yourself as a person and how you fit into the world. Considering the fact that each person's life is unique and complex, it is very difficult to provide any specific guidelines for selecting experiences that have had a major impact on you as an individual. These events can be either positive or negative in nature, as we are often able to find meaning in both good and bad experiences. The degree of personal relevance that a particular event has had with regard to your life story is basically the only necessary qualification for deciding whether or not an experience is "significant."

I would like you to try to be as specific as possible in your descriptions of these episodes. In other words, I am more interested in particular incidents that are set in a certain time and place (i.e., you should try to limit yourself to a single day or afternoon, rather than a whole season or year). For instance, if you are discussing a significant relationship, try to describe a single interaction with that person, as opposed to talking about the entire course of the relationship.

Now that you have spent a few minutes sifting through the major episodes in your life, I would like you to focus on three time periods in your life: childhood (? to age 12), adolescence (13 to 18), and adulthood (19 to the present). I am going to ask you to describe two events from childhood, four events from adolescence, and four events from adulthood. I would like you to discuss each of the three stages in order, however, I will not require you to describe the various events within these stages in any particular order. I will stop the tape between episodes to give you time to think and if you would like me to stop the tape at any other point, please let me know.

I have made up a list of questions to help you organize your descriptions. You need not address each question specifically, but you should think of them as guidelines to help you formulate your responses.

1. How old were you at the time?
2. What happened?
3. Where did this event take place?
4. How long did this experience last?
5. Who else was present at the time and how did they behave?
6. What were you thinking and feeling at the time?

- \*7. Why was this a significant event in your life?
- \*8. What were you like before having this experience as opposed to what you were like afterwards?
- \*9. How, if at all, has this experience had an impact on who you are at this point in your life?

These last three questions are the most important ones and your descriptions should focus on them, using the other questions to provide background information. If you have any difficulty remembering specific information (e.g., dates), try to approximate as best you can. Do not worry about remembering all of the questions that I have just listed, since I will be prompting you for more information if necessary. If you have any questions, don't hesitate to ask!

## Nuclear Episode Interview Scoring Manual

### I. Behavior

Under the category of behavior, we are looking at those elements of the nuclear episode which deal with actions only. In other words, doing something is the primary focus of this category. For simplicity's sake, let's not include thinking (although, technically it is a behavior) in this category. Any changes in thought or attitude, therefore, will fall under the heading of "cognition" and will be dealt with later.

In order to score an episode for behavior, we must first answer the following questions:

Step 1: Does the episode involve one or more types of behavior?

Hint: Listen for non-cognitive action verbs.

If this question can be answered "yes," then proceed to score this category. If the answer is "no," score 0 for type of change and go on to the next category.

Step 2: Is there a change in behavior from before to after the nuclear episode?

e.g., Is there a change in the frequency of a particular activity?

or Does the person start doing something or stop doing something as a result of the episode?

If the answer is "yes" to any of the step 2 questions, then proceed to score this category. If the answer is "no," then score 0 for type of change and go on to the next category.

### Behavior: Type of Change

Step 3: To score a 2 on type of change, you are looking for the replacement of one behavior by another that is quite different/opposite/mutually exclusive from the original behavior.

- Is the person taking up a new behavior that is quite different from the types of behavior they had engaged in before the nuclear episode? (0 → behavior).
- Is the person quitting a behavior that was fairly strong (frequent, important) before the episode? (behavior → 0).
- Is the person quitting one behavior and taking up another that is quite different from the original activity? (behavior -- opposite behavior). (e.g., "I used to be a prostitute, but after (the episode) I gave up prostitution and joined the convent...).

Note: Major increases in behavior (from a tiny bit to a lot) or major decreases in behavior (from a lot to a tiny bit) are not

Nuclear Episode Interview Scoring Manual (continued)

not scored as 2. If the same behavior is present from before to after the episode, it probably is not a 2.

Be sure to pay attention to types of behavior and how similar or different they are to one another. You will have to use your best judgment in categorizing types of behavior (e.g., giving up professional baseball to become a professional golfer is not quite as drastic a change as giving up professional baseball to become a beautician).

To score a 1 for type of change, you are looking for an increased or decreased tendency to engage in a particular behavior. The person is heading in a particular direction before the episode and the episode has served to accelerate that process.

- Is the person taking up a new behavior that is somewhat different, but not completely foreign, from the types of behavior that she had engaged in prior to the episode?
- Is the person quitting a behavior that was not that strong/frequent before the episode? (Note: This would be the case if the person had been cutting down on smoking and the episode caused them to quit completely, but you would score a 2 if the person had not been cutting down on smoking prior to the episode and the episode caused them to quit completely).
- Does the episode cause an increase in the frequency of a behavior that was already present in the person's repertoire before the episode? (a little → a lot).
- Does the episode cause a decrease in the frequency of a behavior, without resulting in the complete omission of the behavior from the person's repertoire? (a lot → a little).

Essentially, the behavior needs to be present both before and after the nuclear episode, with some change in its frequency as a result of the episode, to be scored a 1 on type of change.

II. Cognition

Under the category of cognition, we are looking at those elements of the nuclear episode which deal with attitudes, beliefs, values, awareness, or understanding. Cognition is perhaps the most common category of change with regard to significant life events and their impact on the individual.

In order to score an episode for cognitive change, we must first answer the following questions:

Step 1: Does the episode involve any type of thinking or way of looking at the world?

Hint: Listen for any verbs involving mental activity, such as

thinking, knowing, feeling, realizing, believing, understanding, liking, disliking, etc.

If this question can be answered "yes," then proceed to score this category. If the answer is "no," score 0 for type of change and go on to the next category.

Step 2: Is there a change in thinking from before to after the episode?  
e.g., Is there a change in the person's view of the world or attitude about a particular issue as a result of the episode?  
or Does the episode lead to some realization or new understanding of the world or life in general?

If the answer is "yes" to any of the step 2 questions, then proceed to score this category. If the answer is "no," then score 0 for type of change and go on to the next category.

### Cognition: Type of Change

Step 3: To score a 2 on type of change, you are looking for a major revision of beliefs or attitudes resulting from the episode, such that one belief or attitude is replaced by another that is quite different/opposite/mutually exclusive from the original belief or attitude.

- Is the person adopting a new belief or attitude that is very different from the types of beliefs or attitudes that they held prior to the episode?
- Is the person relinquishing a particular attitude or belief that they were very committed to before the episode?
- Does the episode cause the person to switch from one way of thinking to another that is quite different/opposite from their original point of view?

To score a 1 for type of change, you are looking for an increased or decreased commitment to a particular belief or attitude as a result of the episode. The attitude or belief does not change in any profound way, but the person's level of commitment (the strength of the attitude) is enhanced or diminished because of the episode.

- Is the person adopting a new attitude or belief that is somewhat different, but not completely foreign, from the types of attitudes or beliefs that they had held prior to the episode?
- Is the person relinquishing a particular attitude or belief that they were not very committed to before the episode?
- Does the episode cause the person to become more committed to a particular attitude or belief that they were already somewhat committed to before the episode? (a little → a lot).
- Does the episode cause the person to become less committed to a particular attitude or belief, without resulting in a complete

loss of commitment to that attitude or belief? (a lot → a little).

### III. Goal-Orientation

Under the category of goal-orientation, we are focusing on those elements of the nuclear episode which deal with the person's drives, aspirations, or goal-directed behavior. This category is potentially more confusing than the others, since certain aspects of behavior and/or cognition can fall under this category.

In order to score an episode for goal-orientation, we must first answer the following questions:

Step 1: Does the episode involve a specific goal or aspiration on the part of the individual?

Hint: Listen for verbs such as "hoping," "desiring," "wanting," "planning," etc.

If this question can be answered "yes," then proceed to score this category. If the answer is "no," score 0 for type of change.

Step 2: Is there a change in the person's goal(s) from before to after the nuclear episode?

e.g., Is there a change in the intensity of the person's desire to achieve a particular goal?

or Does the episode cause the person to alter her aspirations for the future in some way?

If the answer is "yes" to any of the step 2 questions, then proceed to score this category. If the answer is "no," then score 0 for type of change.

#### Goal-Orientation: Type of Change

Step 3: To score a 2 on type of change, you are looking for a replacement of one goal by another that is quite different/opposite/mutually exclusive from the original goal.

- Is the person adopting a new goal that is very different from the goal(s) that she had prior to the nuclear episode?
  - Is the person abandoning a particular goal that she had strongly desired/pursued before the episode?
- (Note: If there is a change in the subject's pursuit of a particular goal as a result of the episode, this would be scored as a change of both goal-orientation and behavior. However, episodes that result only in a change of desire are typically scored for change in the area of goal-orientation only).
- Does the episode cause the person to switch from one goal to another that is quite different/opposite from her original goal?

To score a 1 for type of change, you are looking for an increased or decreased desire to achieve a particular goal as a result of the episode. The particular goal in question need not change dramatically, but the intensity of the person's desire to achieve the goal should increase or decrease as a result of the episode

- Is the person adopting a new goal that is somewhat different, but not completely foreign, from the types of goals that she had had prior to the episode? (e.g., "I always wanted to be a doctor, but since (the episode) I've decided that I'd rather be a nurse instead").
- Is the person abandoning a particular goal that they were not overly desirous of prior to the episode?
- Does the episode serve to intensify the person's desire to achieve a particular goal that they were already somewhat desirous of prior to the episode? (a little -- a lot).
- Does the episode serve to decrease the person's desire to achieve a particular goal, without resulting in a complete abandonment of that goal? (a lot → a little).



Subject #: \_\_\_\_\_

EPISODE #	AGE	BEHAVIOR	COGNITION	GOALS

NUCLEAR EPISODE SCORING FORM

EPISODE SUMMARY FORM

1. How confident are you that the details of the incident you just described are accurate?

Not at all confident	Not very confident	Fairly confident	Pretty sure	Completely confident
1	2	3	4	5

2. How important was this event in the course of your life?

Not at all important	Slightly important	Moderately important	Very important	Extremely important
1	2	3	4	5

3. How much did this event change your life?

Not at all	Slightly	Moderately	A lot	Drastically
1	2	3	4	5

4. How long did the impact of this experience last?

Less than one week	Less than one month	Less than one year	Less than two years	More than two years
1	2	3	4	5

Subject #: \_\_\_\_\_

SENTENCE-COMPLETION FORM FOR FEMALES

1. For a woman a career is
2. A girl has the right to
3. The thing I like about myself is
4. Education
5. A wife should
6. Rules are
7. When I get mad
8. Men are lucky because
9. I am
10. A woman feels good when
11. My husband and I will
12. A woman should always

\*

Stages of Ego Development

I-1	Symbiotic
I-2	Impulsive
Delta	Self-protective
I-3	Conformist
I-3/4	Conscientious/Conformist
I-4	Conscientious
I-4/5	Individualistic
I-5	Autonomous
I-6	Integrated

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\* table based on Loevinger, 1976, pp. 24-25.

Identity Interview<sup>\*</sup>

Introduction:

How far along did your father get in school? What does he do now?  
How far along did your mother get in school? What does she do now?

Occupation:

What are you going to do after college?  
When did you come to decide on (career choice)?  
What people or experiences have been major influences on your plans for the future?  
Did you ever consider anything else? What? Anything besides that?  
What seems attractive about (career choice)?  
Most parents have plans for their children, things they would like them to go into or do -- do yours have any plans like that for you?  
How do your folks feel about your plans now?  
What kinds of difficulties or problems do you see associated with your decision to (career choice)?  
If these things were to become difficult, what would you do then?

Religion:

Do you have any particular religious affiliation or preference or philosophy?  
How about your folks?  
How did you come to be a \_\_\_\_\_?  
What people or experiences have influenced your thinking about religion?  
Were you ever very active in church? How about now? Do you get into many religious discussions?  
How do your parents feel about your beliefs now?  
Are yours any different from theirs?  
Was there ever a time when you came to doubt your religious beliefs? How did it happen? How did you resolve your questions?  
How are things for you now?  
Do you anticipate that your religious beliefs will stay the same or change over the next few years?

Friendships:

Do you have 1 or 2 close friends -- people you spend a lot of time with?  
How long have you known them?  
What do you do and talk about together?  
What are the important things a friend should be?  
What do you value especially about your friends?  
Would you say that your close friends are similar to you or different from you? In what ways?  
Is your idea of what a friend is or should be the same as it used to be, say, when you were in high school? How?  
If your closest friend changed in some way that you didn't, would

### Friendships: (continued)

you still be friends?

Why is it that good friends sometimes grow apart?

Do your parents encourage you to spend time with your friends?

What kinds of friends do your parents think you should have?

How do they feel about your friends now?

Have you and your parents ever disagreed about whether your friends are responsible or level-headed?

Have you ever begun a friendship or maintained a friendship with someone of whom your parents disapproved?

Was this disagreement resolved in some way? How?

### Men's and Women's Roles:

Some people feel that men and women are basically different in the way they think or behave or act with other people. Do you think that men and women are different? How?

Men are often thought of as having strong goals and being forceful and direct. How do you feel about women who act this way? Do you know any women who act this way?

Women are often thought of as people who express their feelings and emotions openly toward their friends. How do you feel about men who act this way? Do you know any men who act this way?

Now I'm interested in finding out how you think married couples should deal with the many tasks involved in the family.

Who should take care of young children (infants and preschoolers)?

Who should provide financially?

How should major decisions, such as buying a car or house, be made?

What if only one person makes the money?

Are there some situations where one member should have more voice than another? When?

Do you anticipate situations where your answers could be different?

What situation?

How do your parents handle each of the family responsibilities we have been discussing?

Do you discuss these issues with your parents? With your friends or dates?

What other people or experiences have influenced your thinking about men's or women's roles?

Do you expect that your ideas about men's and women's roles will stay the same or change over the next few years? Have your ideas changed over the last few years?

\* from Grotevant, Harold D. & Cooper, Catherine R. (1980). Assessing adolescent identity in the areas of occupation, religion, politics, friendships, dating, and sex roles: Manual for administration and coding of the interview.

APPROVAL SHEET

The thesis submitted by Carol E. Kirshnit has been read and approved by the following committee:

Dr. Dan P. McAdams, Director  
Associate Professor, Psychology, Loyola

Dr. Fred Bryant  
Associate Professor, Psychology, Loyola

The final copies have been examined by the director of the thesis and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the thesis is now given final approval by the Committee with reference to content and form.

The thesis is therefore accepted in partial fulfillment of the requirements for the degree of Master of Arts.

11/21/85  
Date

Dan P. McAdams  
Director's Signature